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ADMINISTRATION REPORT

OF THE

ELECTRICITY DEPARTMENT

FOR 1948-49

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MADRAS
1949

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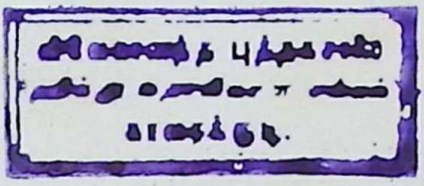

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SIR HENRY HOWARD
Chief Engineer for Electricity 1927–1939.
Consulting Engineer to Government 1939–1948.

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ADMINISTRATION REPORT OF THE ELECTRICITY DEPARTMENT FOR 1948–49.

SECTION I—GENERAL REVIEW.

1. *Introductory—Sir Henry Howard.*—In presenting the twenty-second annual report of the Electricity Department for the year ended 31st March 1949 the Chief Engineer desires, at the outset, to pay a tribute of appreciation to Sir Henry Howard, whose long and distinguished association with the department ended this year.

Major H. G. Howard, as he then was, took office on 6th September 1927 as Chief Engineer for Hydro-Electric Development under the Madras Government. Previously some hydro-electric surveys had been done by the Public Works Department but no electricity schemes had been undertaken by the Government. Sir C. P. Ramaswami Ayyar, who was member of the Executive Council in charge of Electricity at the time, enunciated, in 1925, the policy of development of the country's power resources by the State and appointed Major Howard to form a new department to undertake the task.

Major Howard had had wide experience in hydro-electric work in America, principally in Mexico and Chile, and on his arrival in Madras applied himself to his job with characteristic energy. He started work on the Pykara Hydro-Electric Scheme and brought it to operation in 1933. Simultaneously several other schemes were investigated and reports prepared. The Mettur Scheme was then taken up and completed in 1937. Thermal schemes were started at Visakhapatnam and Vijayavada in 1938 and 1939 and work on the Papanasam Hydro-electric Scheme was also commenced.

In recognition of his valuable services, he was made a C.I.E. in 1935 and was knighted in 1939. He retired from the post of Chief Engineer on 31st October 1939, giving place to Col. M. G. Platts, but continued his association with the department as Consulting Engineer to Government. He served in this capacity till 15th April 1948 when he proceeded on leave for 10 months. It was hoped that the would return to his post after the leave but much to the regret and disappointment of the department he decided to relinquish his appointment with a view to settle in Canada.

Sir Henry Howard, as founder of the Electricity Department with over twenty years of continuous association with it, was intimately connected with all the schemes so far carried out. His contribution to electrical progress in this province is evident in every direction. His talents as a great engineer and organizer went to build the department to the stature it now has as a big public utility. He trained a large number of Indian engineers, guided them and put them in positions of responsibility.

The Madras Grid idea was his and in his very first Administration Report of the department, the one for 1927–28, a Grid map was incorporated. He suggested fifteen years back the formation of an Electricity Board for the administration of the utility and the idea has since been endorsed by the Government of India in their Electricity (Supply) Act, 1948.

Sir Henry has the great capacity of moving on easy terms with all classes and types of people. The charm of his personality has won him many friends.

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The department records its grateful appreciation of the distinguished services rendered by Sir Henry Howard and wishes him a long, happy and enjoyable life in his retirement.

The Government have also placed on record their appreciation of the very valuable services rendered by Sir Henry Howard in the development of Electricity in this Province for over 20 years both as Chief Engineer for Electricity and Consulting Engineer for Electricity.

2. *Salient features.*—The salient features in the administration of the department during 1948–49 were—

(1) Capital expenditure for the year on new projects and extensions under construction amounted to Rs. 2·7 crores.

(2) Power demands totalled 121,975 K.W. and energy generated by the department amounted to 569 million units. A graph showing the growth of demand and energy since the commencement of the department faces this page.

(3) Two 2,500 K.W. transportable power sets costing around Rs. 30 lakhs were installed to meet the immediate power needs of the Madras City.

(4) Construction of the Madras-Mettur 110,000 volt transmission line was completed.

(5) Spillway gates on the Papanasam reservoir were installed enabling full storage.

(6) The Water Mills of Messrs. Harvey & Co. at Ambasamudram, operating on an old water concession were changed to Government grid supply.

(7) Electric supply was extended to 194 new villages and 2,288 additional pump sets.

3. *Load development.*—Due to the shortage of generating capacity in all the stations and due to difficulty in obtaining line materials, additional loads during the year were confined generally to agricultural pump sets.

The aggregate of power demands on the Government systems was 121,975 K.W. and the units generated 569 millions as shown below against 105,620 K.W. and 434.6 millions respectively last year :—

Name of Government system.	Demand in K.W.	Total generation in millions of units.
Hydro-electric—		
Pykara	35,600	208·2
Mettur	35,800	156·8
Papanasam	18,500	71 77
Thermal—		
Madras	24,500	102·07
Visakhapatnam	2,800	10·68
Vijayavada	3,900	17·30
Kakinada	590	1·89
Kurnool	165	0·56
Cuddapah	120	0·13 *
Total ..	121,975	569·40

* From 18th November 1948 to 31st March 1949.

For the Province, figures for power generation from all sources were as follows :—

	Generations in millions of units.
Government—	
Hydro-electric	436·77
Thermal	132·63
Licensees	6·73
Total ..	576·13

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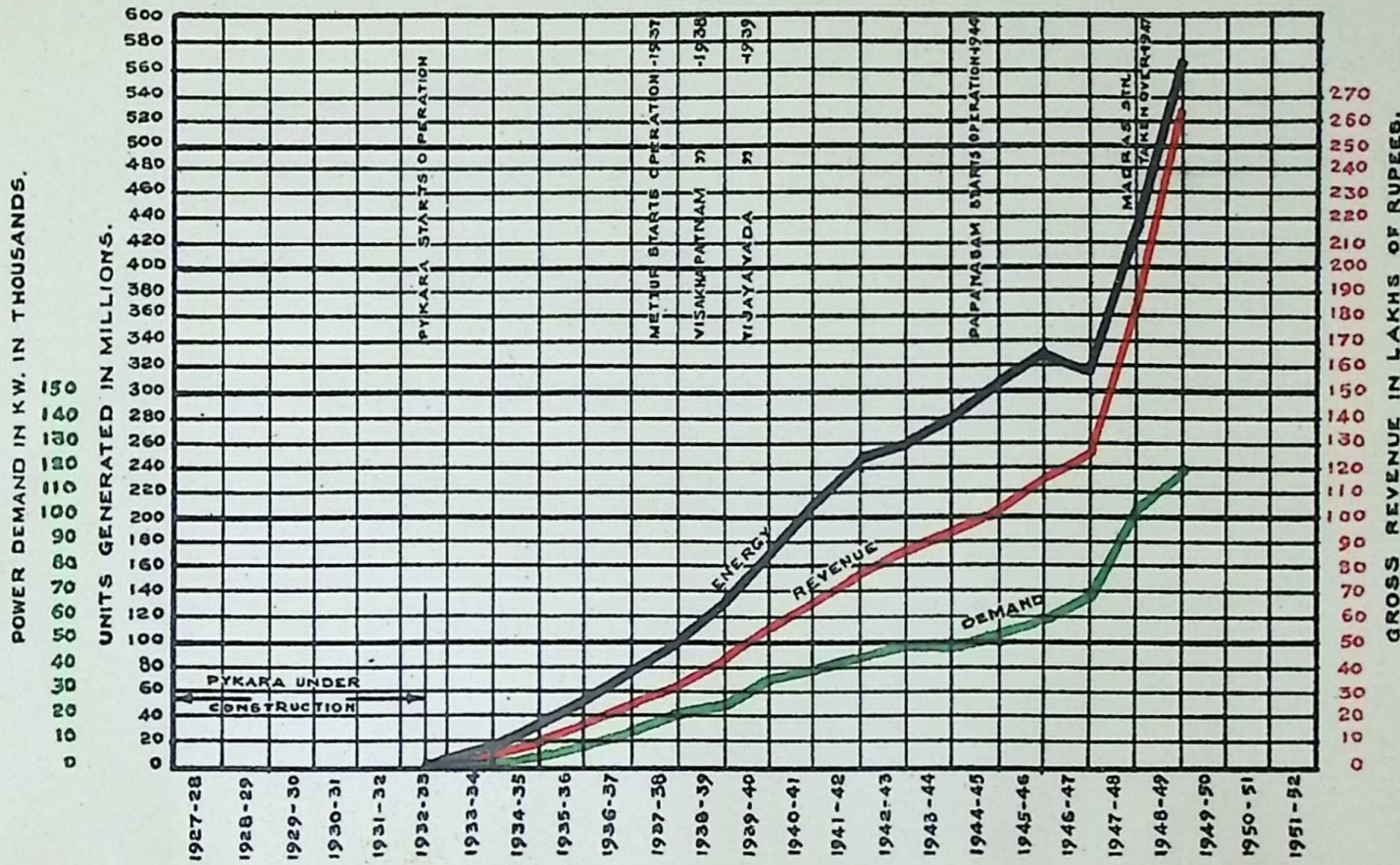
MADRAS ELECTRICITY DEPT.

GROWTH OF POWER DEMAND & REVENUE.

(1927–1949.)



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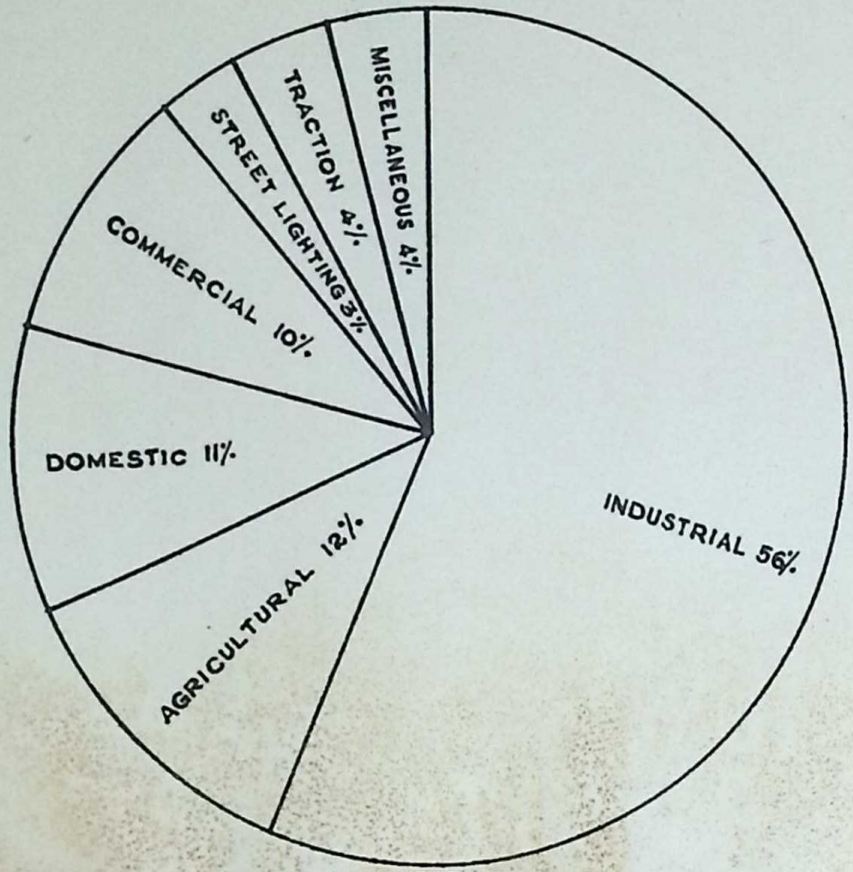
UTILIZATION OF ELECTRIC POWER IN MADRAS PROVINCE 1948–'49



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The total generation increased by 12 per cent over last year figure. This department was responsible for 99 per cent of the power output in the Province.

The power generated was utilized as under—

S. No.	Use.	Percentage of power generated.
1	Industrial supplies	56
2	Irrigation and agriculture	12
3	Domestic heat, power, lights and fans	11
4	Commercial do.	10
5	Public lighting	3
6	Traction	4
7	Miscellaneous	4
	Total	100

A diagram illustrating the above faces this page.

4. *Financial results.*—The gross revenue earned by Government undertakings during 1948–49 was Rs. 268 lakhs against Rs. 186·7 lakhs last year representing an increase of nearly 43 per cent. Details were as follows :—

Name of Government system.	Year of operation.	Total capital outlay. IN LAKHS.	Gross revenue. IN LAKHS.	Working expenses. IN LAKHS.	Net revenue. IN LAKHS.
Hydro-electric—					
Pykara	Sixteenth.	410·29	162·98	72·62	90·36
Mettur	Twelth	325·75			
Papanasam	Fifth	248·18			
Thermal—					
Madras	Second	*163·73	105·07	93·39	11·68
Cuddapah	First	†2·52			
Visakhapatnam	Tenth	42·95			
Vijayavada	Tenth	66·11			
Kakinada	Ninth	8·98			
Kurnool	Second	‡1·60			

* Tentative, subject to modification after valuation of Madras Electric Supply Corporation undertaking.

† Tentative, subject to modification after final settlement of purchase price of the undertaking in due course.

‡ Tentative, as it does not include the purchase price for the undertaking payable to the municipality which is not finally settled yet.

The receipts through the Inspectorate amounted to Rs. 13·69 lakhs made up of Rs. 11·16 lakhs from Electricity Duty, Rs. 1·21 lakhs from inspections under the Indian Electricity Act and Rules, Rs. 1.12 lakhs from penalty from excess consumption of electricity and Rs. 0·20 lakhs from royalty for use of Government water for generation of electricity.

5. *Number of consumers.*—The total number of consumers served by the electrical undertakings in this Province including Government ones was 217,768 as on 31st March 1949. Of these 207,188 were in the area covered by the Government undertakings—67,700 served directly by the Electricity Department and 139,488 by licensees distributing Government power. The remaining 10,580 were served by self-generating licensees. Details are as under—

Name of system.	Number of consumers. Served by the Electricity department.	Served through distributing licensees in Government area.	Served by other licensees.	Total.
Hydro-electric—				
Pykara	14,766	27,706	..	..
Mettur	15,615	67,892	..	..
Papanasam	7,209	29,315	..	..

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Name of system.	Number of consumers.			
	Served by the Electricity department.	Served through distr buting licensees in Government area.	Served by other licensees.	Total.
Thermal—				
Madras	25,455	1,283	..	..
Visakhapatnam	1,8-8	2,933	..	..
Vijayavada	977	8,8)5	..	..
Kakinada	877	1,554	..	..
Kurnool	913	..	..	..
Total .	67,700	1,39,488	..	2,07,188
Other licensees	..	..	10,580	10,580
			Total ...	2,17,768

One hundred and ninety-four villages were electrified during the year—146 by the Department and the balance of 48 by licensees. The total number of villages and towns having electric supply at the end of the year was 1,449. Of these 729 villages were served directly by the Electricity Department and the rest by licensees. Appendices H-1 and 2 give the names of villages and towns.

6. *Transmission lines and sub-stations.*—The Government transmission and distribution net work included 6,709 miles of lines against 6,304 miles in the previous year resulting in an increase of 405 miles. Details of lines under high tension and low tension in each system were as under—

Name of system.	Number of route miles of lines.	
	H.T.	L.T.
Pykara	1,477	1,253
Mettur	1,489	727
Papanasam	442	239
Andhra	417	188
Madras	159	318
Total ..	3,984	2,725

E.H.T. and H.T. transformer stations.

System.	66 and 110 K.V.		22 and 33 K.V.	
	Number.	Capacity.	Number.	Capacity.
		K.V.A.		K.V.A.
Pykara	7	81,750	3	2,900
Mettur	14	48,350	11	8,650
Papanasam	6	23,000	3	2,850
Andhra	..	..	8	5,000
Madras	..	..	7	4,100
Total ..	27	1,53,100	32	23,500

Note.—Does not include transformers in power-houses.

7. *Agricultural development.*—Major portion of the load connected up during the year was for agricultural pumping. High priority was given to schemes covering supply to pump sets on account of the Grow-More-Food Campaign. One thousand six hundred and sixty-eight agricultural pump sets were connected by this Department and 620 by licensees during the year.

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The following table gives details of the agricultural services in the different areas :—

Name of the works.	Number of services connected in 1948–49.	Connected load in K.W.	Total number of agricultural services at the end of the year.	Total connected load in K.W. of the agricultural services at the end of 1948–49.
Pykara system	782	3,038	4,585	20,338
Mettur system	617	2,313	2,560	12,185
Papanasam system	119	363	428	1,456
Madras system	23	74	23	74
Visakhapatnam system	1	4	14	75
Vijayavada system	123	366	405	1,573
Kakinada system	3	15	6	34
Kurnoo system	..	..	1	2
	1,668	6,173	8,022	35,737
Licensees distributing Government power.	593	2,408	3,136	13,911
Total ..	2,261	8,581	11,158	49,648
Other licensees	27	102	67	246
Total in all areas ..	2,288	8,683	11,225	49,894

The target fixed for new agricultural connections by the Department during 1948–49 was 2,400. Notwithstanding the special efforts of the Department, it was possible to connect up only 1,668 numbers of services due to shortage of line materials. This does not include 264 wells in the Mettur System for which the lines were extended but the parties were not ready to take supply.

There are over 20,000 applications for supply of power to agricultural pump sets pending.

8. *Construction activities.*—Despite delay in receipt of materials, construction work expanded largely and a capital expenditure of Rs. 2·7 crores was incurred on new schemes and extensions. The outlay constitutes the highest for the department, the previous one being Rs. 2.67 crores in 1947–48.

Work on the following major projects continued to progress satisfactorily considering prevailing circumstances :—

(1) Machkund Hydro-electric Scheme.
(2) Visakhapatnam Power House Extensions.
(3) Vijayavada-Rajahmundry-Samalkot Extensions.
(4) Madras Thermal Station Extensions.
(5) Ceded Districts Scheme.
(6) Moyar Hydro-electric Scheme.
(7) Pykara III Stage Extensions.
(8) Papanasam II Stage Extension.
(9) Mathurai Thermal Scheme.

Full details of the present stage of works are given in Section II. Besides the above the programme of main and branch lines constructions carried out by the Operation Branch during the year resulted in an addition of nearly 400 miles of lines.

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9. *Revision of estimates.*—Owing to the steep rise in cost of plant, materials and labour, the estimates for all the major schemes under execution had to be revised and sanction of Government sought. Revised figures are given below :—

	Capital outlay.	
	Initial.	At the end of 10 years.
	RS. (IN LAKHS)	RS. (IN LAKHS)
1 Pykara plant II and final stage extensions ..	326·35	489·35
2 Moyar Hydro-electric Scheme	364·201	463·90
3 Madras-Mettur interconnection Scheme	123·94	218·00
4 Papanasam Plant II stage (including Mathurai Thermal Scheme).	285·50	336·00
5 Machkund Hydro-electric Scheme	1,024·50	1,318·11
6 Vijayavada–Rajahmundry–Samalkot Extensions.	157·74	
7 Madras Power Station Extensions	265·8	621·22

10. *Schemes awaiting sanction.*—The important major schemes submitted to Government during the year and awaiting Government sanction were—

	Capital outlay.	
	Initial.	At the end of 10 years.
	RS. (IN LAKHS)	RS. (IN LAKHS)
1 Cuddapah Thermal Scheme	102·46	142·08
2 Kurnool Thermal Scheme	141·66	145·27
3 Nandyal Scheme	11·38	14·92 (in 5 years)
4 Tadpatri Scheme	6·55	11·06 (in 5 years)
5 Extension of supply to South Kanara from Mysore	48·32	62·05 (in 10 years)

Note.—The Cuddapah, Nandyal and Tadpatri schemes have since been sanctioned by Government in G.Os. Nos. 1796, P.W, dated 18th May 1949, 1819, P.W., dated 19th May 1949 respectively.

11. *Programme for* 1949–50.—(*a*) Work on the Machkund Hydro-electric Scheme, Vijayavada-Rajahmundry-Samalkot Extensions, Madras Thermal Station Extension, Moyar Hydro-electric Scheme and Pykara III Stage Extensions will continue.

(*b*) Work on the Ceded Districts Scheme will be pushed through and section of the line from Sokke to Tungabhadra Dam will be energized by 1st June 1949. Supply to Bellary, Guntakkal, Alur and Adoni will be made available by the end of the year.

(*c*) Hindupur will be got ready to receive Mysore supply.

(*d*) Nellore Thermal Station will be commissioned.

(*e*) Visakhapatnam Power House Extensions, Mathurai Thermal Scheme and Papanasam II Stage Extensions will be completed.

(*f*) Work on the following major Extensions will be in progress :—

(1) West Godavari Extensions.
(2) Chingleput-Arkonam-Kancheepuram Extensions.
(3) 66/119 K. V. Extensions from Erode to Tiruchirappalli and Dalmiapuram.
(4) Erode-Salem 66 K.V. Extensions.
(5) Tanjore-Mayuram-Chidambaram Extensions.
(6) Negamam-Pollachi Extensions.
(7) Mathurai-Rajapalayam-Tenkasi Extensions.
(8) Papanasam-Tirunelveli-Kayattar Extensions.

The budget for capital expenditure for 1949–50 is Rs. 6·01 crores.

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12. *Electrical Inspectorate and Licensees.*—The number of licensees undertaking at the close of the year was 79 of which 34 were managed by local bodies and 45 by private companies. This was inclusive of four undertakings of Pudukkottai State since merged in the Province. The Cuddapah, Kollegal and Valparai undertakings were taken over by the department. No new licence was granted during the year. Messrs. Kanara Ceramics, Limited, was given sanction under section 28 to effect temporary supply in the area of the Kasaragod Panchayat. At the close of the year 13 licensees were levying war costs surcharge.

The accounts of 65 licensees were scrutinized during this year.

Nine hundred and fifty-seven cinemas were functioning at the end of the year.

The total number of accidents including those on lines owned and operated by the Government was 191 of which 60 were fatal.

13. *Electricity buildings.*—The Ordnance Clothing Factory buildings intended for the accommodation of the offices of this department have been taken over from the Military authorities and an estimate for Rs. 0·89 lakhs has been sanctioned for special repairs to the building. A consolidated estimate for Rs. 3,597 lakhs for completion of repairs to the buildings had been sent to Government and is awaiting sanction. The special repairs are proceeding and on completion all the offices will move into the buildings. These buildings are, however, not suitable for the permanent accommodation of this department and the proposal to construct new buildings for the headquarter offices of this department will have to be taken up when prices of building materials show a tendency to go down.

14. *Deputation abroad.*—Sri S. R. Krishnamurthi, Chief Construction Engineer, proceeded in May 1948 on deputation to Europe to attend the Third International Conference on High Dams at Stockholm. He also attended the Conference on Soil Mechanics and Foundation Engineering at Rotterdam. He later visited works of engineering interest in Poland, Holland, France, England and United States of America and returned to India at the end of August 1948.

15. *Foreign training.*—Mr. S. Muhammad Ali Sahib completed his training in the United Kingdom and returned to India at the end of September 1948. Sri R. Ramachandra Pillai was undergoing training in the English Electric Company's Works at Rugby in the manufacture and assembly of the 15,000 K.W. turbo alternator set for the Basin Bridge Power Station. About the end of the year Government sanction was received for the deputation of the following officers to United States of America and United Kingdom for higher technical training in Electrical Engineering as under :—

(1) Sri P. V. A. Narayanamurthi, Superintending Engineer, to United States of America for one year.

(2) Sri P. Rajagopal Pillai, Divisional Electrical Engineer, to United States of America for two years.

(3) Sri Y. S. Rao, Assistant Engineer (Electrical), to United Kingdom for two years.

Sri Y. S. Rao will undergo training in the manufacture and assembly of boilers ordered of Messrs. Babcock and Wilcox for the Basin Bridge Power Station.

The Provincial Government Scheme for the foreign training of Engineers of this department referred to in the last report was approved by Government subject to the condition that not more than two or three officers are deputed each year.

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16. *Nationalization.*—Government have decided on the nationalization of all electrical undertakings including those operated by Local Authorities. Necessary legislation to implement this decision is under the consideration of Government. Proposals were submitted to Government for the acquisition of Anantapur, Hospet, Bellary, Tirumalai-Tirupati, Ongole, Udipi, Salur-Parvatipur, Chicacole, Prodattur and Rajahmundry undertakings as also the suburban undertakings at Villivakkam, Sembiam, Tiruvottiyur and Alandur, with the consent of the licensees. The acquisition of these undertakings, in advance of the nationalization enactment, will accelerate the pace of nationalisation considerably.

Note.—The acquisition of the Anantapur undertaking has since been sanctioned by Government in G.O. No. 1797, P.W., dated 18th May 1949.

As stated in last year's report notice of Government's intention to purchase the undertakings on expiry of licence was served on Tinnevelly-Tuticorin Electric Supply Company, Salem-Erode Electricity Distribution Company, The Mangalore Electric Supply Corporation, Limited, The Kumbakonam Electric Supply Company, Limited, and the Reliance Electric Supply Company, Limited, Okkur. Sanctions for capital expenditure by these licensees during the period of notice were accorded after due scrutiny of the applications.

Sanction was received from Government at the end of the year for arranging for Government audit of licensees' accounts being done departmentally instead of by outside auditors. Many private licensees have found it very difficult to raise capital for extensions and have applied to Government for loans. The applications are under consideration of Government.

17. *Electricity (Supply) Act.*—This Act was passed by the Dominion Parliament on 10th September 1948 and certain sections of the Act have already come into force in the Province. Suitable instructions to licensees in regard to the provisions that have come into force have been issued by the Chief Electrical Inspector to Government. One of the provisions of the Act requires the formation of Electricity Boards for management of Electric Supply Industry by Provincial Governments before September 1950, unless extension of time is granted by the Central Government for valid reasons.

18. *Heavy power plant industry.*—The Madras Government have recommended that the heavy power plant industry proposed to be set up by the Central Government be located in this Province at the Avadi Military Base Area. The site has been inspected by the British and American Delegations who have been commissioned by the Government of India to submit project reports.

19. *Power demand.*—As will be seen from the detailed report that follows the generating capacity in all the power stations has been brought almost fully to use, leaving little for further development. There is a heavy demand for power and the present rate of increase indicates that even when the power output is doubled with the completion of the five-year programme, it will be just sufficient to meet the growing needs of the Province. Fresh projects have therefore to be taken up urgently.

Designs and specifications for the Tungabhadra Hydro-Electric Scheme are being worked out and a report will shortly be submitted to Government.

Negotiations with the Mysore Government in regard to the Mekadatu Project took place in a series of conferences and a satisfactory agreement is likely to be reached. Adequate supply to the Mettur and South Canara areas would then be assured.

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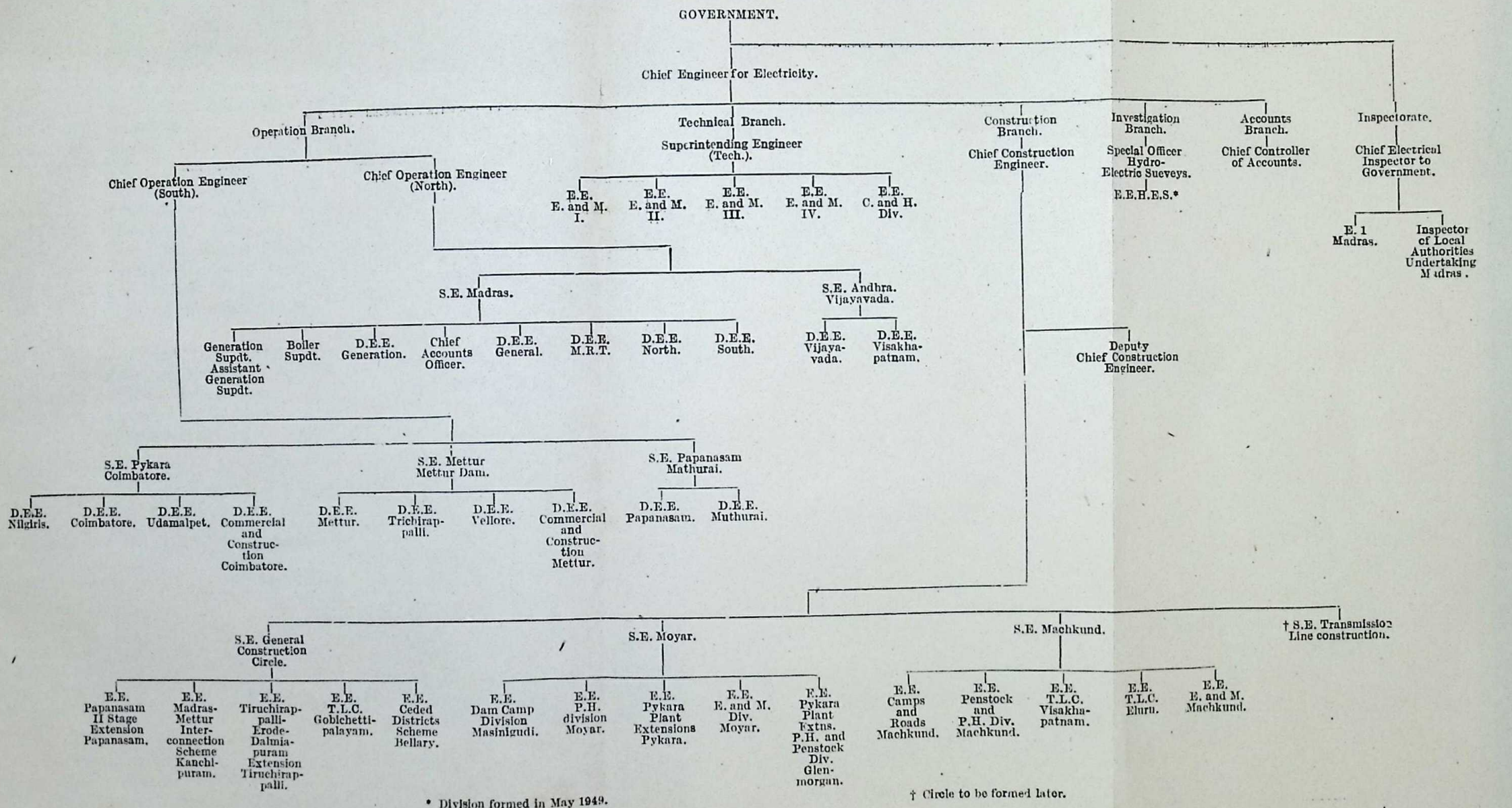
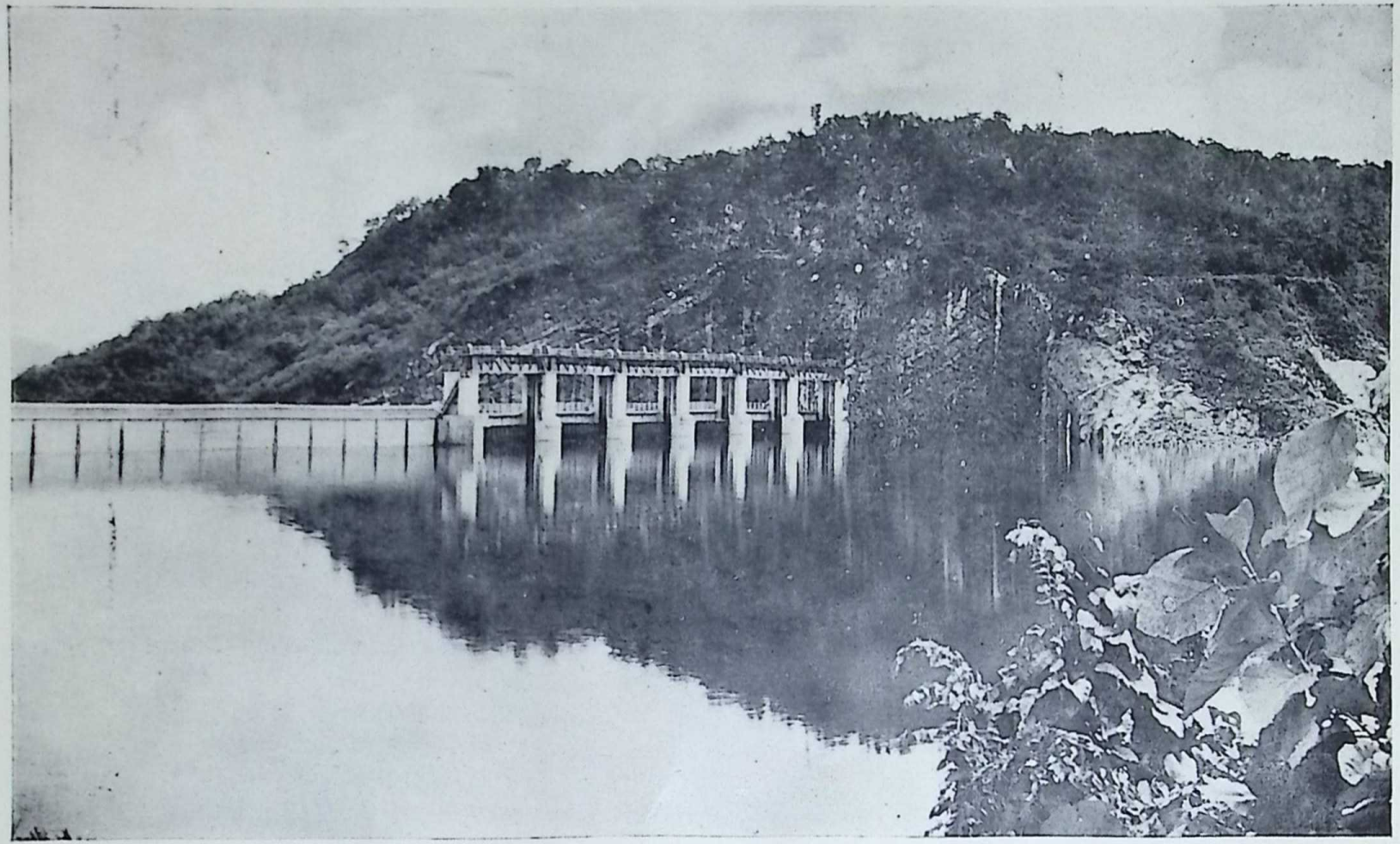
ORGANIZATION OF THE ELECTRICITY DEPARTMENT.



* Division formed in May 1949.

† Circle to be formed later.



UPSTREAM VIEW OF THE SURPLUS SPILLWAY GATES WHEN THE LAKE LEVEL WAS 860·7.

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Investigation of the Kundah hydro-electric site in the Nilgiris was continued during the year. A promising scheme of about 100,000 K.W. capacity appears possible.

The delays that are occurring in Machkund Project work and the rapid growth of demand in the Andhra area necessitate immediate addition to the generating capacity, and proposals for a few diesel sets are in hand.

20. *Organization.*—The framework of the organization of this department is given in the chart on the opposite page. The designations of the posts of General Superintendent, Power Development and General Superintendent, Operating Systems were changed to Chief Construction Engineer and Chief Operation Engineer respectively. A second post of Chief Operation Engineer was sanctioned by the Government during the year and the work of the Operation Branch was divided into two charges (North and South), the former under the Chief Operation Engineer (North) comprising the Madras and Andhra Systems and the latter under Chief Operation Engineer (South) comprising the Pykara, Mettur and Papanasam Systems.

Proposals for the reorganization of the Accounts Branch referred to in the last report were finalized and submitted to Government. The object of the reorganization is to relieve technical officers of responsibility for accounting work, to improve the standard of accounting work, to collect cost and statistical data for better control of works and formulation of tariffs and to increase the efficiency of the existing organization by adequate check and control from headquarters.

Approval of Government to the reorganization proposals is awaited.

21. *Administration.*—The nationalization programme will, involve taking over of a large number of licensee undertakings. The Government of India Electricity (Supply) Act, 1948, contemplates an Electricity Board for the Province. The question as to when the Board should be formed for this Province is under consideration of the Government.

Detailed report of the activities of the different branches of the department is given in Section II.

SECTION II—DETAILED REPORT.

Construction Branch.

22. *General.*—Despite the difficulties and delays experienced in securing requisite materials and civil engineering staff, the construction branch strove its utmost to keep up the progress of the works as planned. Army surplus stores were acquired to the extent available.

Capital expenditure incurred by this branch during the year totalled Rs. 1·94 crores.

The following works were completed :—

(1) *Papanasam.*—Spillway gates on the Papanasam Dam were erected and put into operation, enabling the impounding of water in the Reservoir to its full capacity.

(2) *Mettur-Madras Inter-connexion line.*—The 110 K.V. transmission line inter-connecting Madras and Mettur was completed.

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23. *Schemes in progress.*—Work on the following major schemes was in progress :—

Serial number and scheme.	Estimated cost in lakhs of rupees.	
	Initial.	At the end of 10 years.
1 The Machkund Hydro-Electric Scheme	1,024·50	1,318·11
2 The Vijayavada-Rajahmundry-Samalkot Extensions.	157·74	..
3 The Visakhapatnam Power-house Extensions ..	27·00	..
4 The Nellore Thermal Scheme	59·71	101·0
5 The Moyar Hydro-Electric Scheme	354·201	463·90
6 The Pykara III stage Extensions	326·35	489·35
7 The Papanasam II stage Extentions	285·5	336·00
8 The Mathurai Thermal Scheme	..	.. *
9 The Ceded Districts Scheme	50·00	..
10 The Madras-Mettur Inter-connexion Scheme ..	123·94	218·00
11 The Hindpur Distribution Scheme	4·92	9·75
12 The Erode-Tiruchirappalli-Dalminagar Extensions.	39·8	41·0 †
13 The Erode-Salem Extensions	24·86	29·5 †
14 The Tanjore-Mayuram-Chidambaram Extensions ..	24·74	27·00 †
15 The Mathurai-Tirumangalam-Rajapalayam Extensions.	..	.. *
16 The Kancheepuram-Chingleput Extensions	16·70	19·10 *
17 The Papanasam-Tirunelveli-Kayatar Extensions ..	..	.. †

* Estimated cost included in item 7. † Estimated cost at the end of eight years.

(1) *The Machkund Hydro-Electric Scheme.*—Contract for the tunnel which is 3,000 feet long was awarded to Messrs. John Mowlem & Co. The contract for the generating plant and machinery and penstocks are yet to be awarded.

The construction power-house was put into service with a 170 K.W. diesel electric set. Erection of a 345 K.W. set and foundation for a 170 K.W. set were in progress. One 10,000 gallons oil storage tank was erected. Acquisition of land in Madras and Orissa areas was in progress. Coffer dam work for diversion dam and drilling boreholes for flume channel were in progress. Roads, bridges culverts and camp buildings were in various stages of construction.

Machkund-Visakhapatnam transmission line survey was in progress.

Anti-malarial measures were in operation and the health of the camp was satisfactory.

(2) *The Vijayavada-Rajahmundry-Samalkot Extensions.*—The two 3,000 K.W. turbo-alternator sets to be installed at the Vijayavada Power-house were received and transported to site. Boiler parts were in transit to site. Pile driving for the foundations for the Vijayavada Power-house Extensions was in progress. Work on low-level cooling water pond, Godavari river crossing and transmission line was proceeding. Staff quarters at Vijayavada and Rajahmundry were completed and construction work at other sub-stations was in progress.

(3) *The Visakhapatnam Power-house Extensions.*—Foundations for the V boiler and walls for the proposed power-house extensions and foundations for the feed water pump for the additional kiosk were all completed. Fabrication of trusses for the power-house foundation for the IV generating unit was in progress, as also the construction of stores.

(4) *The Nellore Thermal Scheme.*—The transportable power sets intended for the scheme had already been received and stored at the Basin Bridge Stores, Madras. In advance of formal acquisition of the site for the power-house, the land had been taken over by the department with the consent of

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the Revenue Department. Proposals for water-supply arrangements from the Pennar were under examination. Tenders for the foundations for M.B. sheds, cooling water pond and construction of quarters were under scrutiny.

(5) *The Moyar Hydro-electric Scheme.*—The generating plant and machinery, transformers, switchgear and other equipment had already been ordered. The manufacture of penstock pipe by the contractors, the Indian Hume Pipe Company was commenced. The grading of penstock and laying haulage track along the penstock was in progress.

Most of the camp buildings, water-supply arrangements, power-supply for construction purposes and erection of construction machinery and tools and plant were completed. There was considerable progress in the masonry works at Singara diversion weir, Maravakandy dam and Moyar forebay and headworks. Excavations for the flume channels were in good progress. Benching in power-house site was almost completed while that for the transformer yard was being proceeded with.

Excavation for foundations, stub setting and tower erection were in progress, on the Pykara-Moyar-Erode 110 K.V. line. Camps and buildings at Erode and Sathyamangalam sub-stations were nearly completed.

(6) *The Pykara III stage extensions.*—Contracts for supply and erection of almost all the machinery were awarded. Erection of construction machinery was completed. Delivery of penstock pipes ordered on Messrs. Ferrum of Poland commenced and grading for erection of penstock was in progress. The Coffer dams both upstream and downstream at the dam site were completed and a portion of the river-bed was excavated for the dam. Camp buildings were completed and occupied.

(7) *The Papanasam II stage extensions.*—The spillway gates on the dam were erected and put into operation. With the installation of these gates an extra of 1,080 M.C.Ft. of water was impounded. Work on the penstock line was almost completed. Nearly half of the low pressure pipe line and penstock was finished and tested.

Civil works in connexion with the installation of the turbine and generator were well under way. Satisfactory progress was made on improvements to roads, quarters, drainage, water-supply, etc. Delay was reported in the delivery of the turbine and generator and the fourth unit would therefore be going to service only early in 1950.

(8) *The Madura Thermal Scheme.*—The 4,000 K.W. turbo set complete with boilers was received at site. Foundations for the power house building was completed and superstructure was in progress. The siding at Samayanallur was completed by the Railway and taken over by the department. Erection of poles for the 33 KV. line from Samayanallur to Pasumalai was nearly completed.

(9) *The Ceded Districts Scheme.*—The 66 KV. transmission line from Mysore border to Tungabhadra dam site was under construction. Arrangements to avail Mysore supply were speeded up and temporary measures where necessary also adopted to ensure that there was no delay in taking supply. The site for the location of the forebay canal power station of the Tungabhadra scheme had not been finally decided at the close of the year. The alternative sites chosen by the Department would be inspected by a committee appointed by the Government of India, so that the site decided upon would not affect monuments of archaeological and historical value at Hampi.

(10) *The Madras-Mettur Inter-connexion Scheme.*—Construction of the 110 K.V. line was completed. The line was tested and taken over from

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the contractors, pending completion of minor items and handed over to the operation Branch for charging and maintenance. The two 5,000 KVA. transformers intended for the Villivakkam sub-station were received.

(11) *The Hindupur Distribution Scheme.*—This scheme contemplates the taking of bulk supply from Mysore and distributing it at Hindupur and around. The 33 KV line from Mysore border to Hindupur sub-station was nearly completed. Work on the 11 K.V. line was making good progress. All arrangements to utilize Mysore supply as soon as made available were completed. The agreement between the Mysore and the Madras Governments for supply of power for the former had not been completed at the end of the year under review.

(12) *The Erode-Tiruchirappalli-Dalmianagar Extensions,*

(13) *The Erode-Salem Extensions,*

(14) *The Tanjore-Mayuram-Chidambaram Extensions,*

(15) *The Mathurai-Tirumangalam-Rajapalayam Extensions,*

(16) *The Kancheepuram-Chingleput-Arkonam Extensions and*

(17) *The Papanasam-Tirunelveli-Kayattar Extensions.*

Survey and land acquisition were in progress in the case of all these extensions and contracts for sub-station equipment were awarded as also for transmission line construction in most cases.

24. *Programme for* 1949–50.—Progress on the various schemes during 1949–50, as programmed is expected to be as follows :—

(1) *The Machkund Hydro-electric Scheme.*—Land acquisition, permanent and temporary buildings with water-supply and drainage arrangements, improvements to roads, bridges and culverts, construction power-house and camp light and power distribution and the first and second stages of work on the diversion weir coffer dam will be completed.

Work on diversion dam, flume and tunnel will be pushed through and excavation of foundation of power-house, grading of penstock slopes and allied works will be taken up. Tunnel work by the contractors will be in progress.

Contract for the Machkund-Visakhapatnam transmission line will be awarded.

(2) *Vijayavada-Rajahmundry-Samalkot Extensions.*—Almost all civil works and the line between Vijayavada and Godavari are likely to be completed. The balance of plant and machinery is expected to be received and erection work commenced.

(3) *The Visakhapatnam Power-house Extensions.*—The work is expected to be completed and operation commenced.

(4) *The Nellore-Thermal Scheme.*—Erection of plant and equipment will be completed and the thermal station will commence operation.

(5) *The Moyar Scheme.*—Most of the civil works at Diversion weir, Maravakandi dam except for earth bund and major portion of the forebay and headworks including excavation of flume channel and contruction of cross-drainages are expected to be completed. The power-house building will be finished. Penstock pipes and haulage tracks are expected to be erected. The Pykara-Moyar-Erode 110 KV line and telephone will be completed. Generators, control equipment and transformers ordered abroad are expected to arrive in the middle of 1949–50.

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(6) *The Pykara III Stage Extensions.*—The construction of the Pykara dam will be in progress and balance of excavation work will be completed. The discharge pipes are expected to be received and erected. Penstock pipe erection will be commenced. Preliminary work in connection with the extensions to the power-house will be attended to.

(7) *The Papanasam II Stage Extensions.*—Low pressure pipe line and penstock erection will be completed. The IV power transformer is likely to be installed. Turbine and generator parts will be received at site and their erection will be completed.

(8) *The Mathurai Thermal Scheme.*—Provided steel and other materials are received in time, the construction of the power-house and cooling pond will be completed and boiler feed supply from the Vaigai will be taken up. Erection of crane and machinery will be in progress.

(9) *The Ceded Districts Scheme.*—The 66, 33 and 11 K.V. lines are expected to be completed as also the electrical and civil works on all the sub-stations. Mysore supply will be taken and power supplied by this department in the first instance to the Tungabhadra dam works, Karnatic Vegetable Oil Factory and other high tension consumers and other local distribution. Hospet and Bellary municipal undertakings will change over to Mysore supply.

(10) *The Madras-Mettur Inter-connexion Scheme.*—The balance of civil and electrical works will be completed and handed over to the operation branch.

(11) *The Hindupur Distribution Scheme.*—The works will be completed and the distribution handed over to the operation branch. The municipal undertaking will be acquired and changed over to Mysore supply.

(12) *The Erode-Tiruchirappalli-Dalmianagar,*

(13) *Erode-Salem,*

(14) *Tanjore-Mayuram-Chidambaram,*

(15) *Mathurai-Tirumangalam-Rajapalayam,*

(16) *Kancheepuram-Arkonam-Chingleput, and*

(17) *Papanasam-Tirunelveli-Kayattar Extensions.*

Construction of the transmission lines will be proceeded with and completed to the extent feasible.

Other Schemes.—Work on other new schemes, viz., installation of thermal stations at Kurnool, Cuddapah, Nandyal, Tadpatri, extensions from Ceded Districts grid, etc., will be taken up on receipt of Government sanction.

25. *Audit, Accounts and Stores.*—The periodical inspection and audit of accounts were carried out by the Accountant-General as follows :—

General Construction Circle—In July 1948 and March 1949.

Moyar Circle—In September 1948 and March 1949.

Machkund Circle—In January 1949.

The Stores section of the Machkund project was under the control of a Stores Superintendent. The Moyar Circle had a Central Stores under a Chief Store-keeper and three sub-stores. The Central Stores at Moyar and two sub-stores at Pykara dam were verified by a Stock Verifier during the year. The distribution of the military surplus stores was handled by the Basin Bridge Construction Stores.

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26. *Accidents.*—There were 52 non-electrical accidents, 28 in the Machkund Circle, nineteen in the Moyar Circle and five in the General Construction Circle. Of these, five were fatal accidents; compensation amounting to Rs. 3,000 was paid; three resulted in permanent disablement and compensation paid amounted to Rs. 662-12-0 and forty-four resulted in temporary disablement, compensation paid being Rs. 447–5–0. In thirty-five cases the compensation amount had not been decided. In two cases, the compensation amounting to Rs. 1,830 was paid by the contractors.

27. *Strikes.*—The workers of Papanasam Hydro-Electric Project Construction Works went on strike twice during the year, once on 3rd and 4th April 1948 as a protest against the arrest of labour leaders and again on 11th May 1948 as a protest against the arrest of the Secretary of the Labour Union.

The workers of Messrs. Indian Hume Pipe Company departmental contractors went on strike from 7th December 1948 to 13th January 1949. Though the strike affected the construction programme, it did not assume any serious turn and fizzled out. The department had a grip on the situation and with the co-operation of the labour department and the local M.L.A., the strike was called off.

28. *Organization.*—The Construction Branch under the Chief Construction Engineer with three circles, Machkund, Moyar and General Construction, continued to be in charge of the major construction works of the department. To cope with the general increase in work in the technical section, an additional post of Assistant Engineer was sanctioned for the office. For acquisition of army surplus stores for departmental requirements an Executve Engineer was employed in the Chief Constructoin Engineer (Electricity)'s Office till the end of February 1949.

For Power-house and Penstock erection under the Pykara Plant Extensions a new division was formed.

In view of the importance of the scheme and the large expenditure involved, posts of one Chief Accountant and one Deputy Chief Accountant were sanctioned for the Machkund Scheme.

The circle office of the Superintending Engineer, Machkund was moved from Visakhapatnam to Machkund, the workspot, in January 1949.

Hydro-Electric Surveys and Investigations.

29. *Investigations and Surveys.*—During the year under review two hydrometric subdivisions were engaged with the preliminary investigation of possible power sites in the Province. Hydro-dynamic charts were prepared for the following basins during the year:—

(1) The Machkund-Sileru river—Area 2,248·80 sq. miles.

(2) The Sarada river in Visakhapatnam—Area 995·25 sq. miles.

(3) The Varahanadi river—Area 445·51 sq. miles.

(4) The Thandavanadhi river in Visakhapatnam—Area 345·95 sq. miles.

(5) The Amaravathi river—Area 3,375·85 sq. miles.

(6) The Bhavani river down to junction with the Moyar—Area 896·01 sq. miles.

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(7) The Moyar River down to junction with the Bhavani River—Area 653.42 sq. miles.

(8) The Chaliyar River (Beypore River)—Area 971·04 sq. miles.

(9) The Kuttiyadi River—Area 183·94 sq. miles.

(10) The Mallapuram River—Area 274·09 sq. miles.

(11) The Thuthapuzha (Kundipuzha) River—Area 221·40 sq. miles.

Kundah Scheme.—The investigation of this promising high-head scheme in the Nilgiris is nearing completion so far as the survey portion is concerned. The exploration as well as construction of weirs will be taken up immediately. Progress of work on survey has been slow as the locality is infested with wild beasts, and is not easily accessible.

Upper Bhavani and Varahapallam Schemes.—Survey work will be taken up on completion of Kundah Survey.

Rainfall and river flow observations were continued and statistics collected in respect of the following basins :—

(1) Sileru; (2) Amaravathi; (3) Moyar; (4) Bhavani; (5) Chaliyarpuzha; (6) Kabbini; (7) Thuthapuzha; (8) Chalakudi and (9) Thambraparni.

The total number of rainfall and river flow stations in the Province at the end of the year were 221 and 11 respectively.

Technical Branch.

30. *Technical Branch.*—This branch continued to be busy with its important and essential work of preparing designs of electrical works, studying technical problems, preparing reports and estimates for new construction schemes including major extensions, issuing specifications and tenders, awarding contracts for sanctioned works and handling a large volume of correspondence with contractors (inland and foreign) Director-General, India Store Department, London, India Supply Mission, Wasington, and other Government departments (Central and Provincial). Proposals for extensions of supply received from the field were scrutinized prior to their sanction by competent authority. Estimates for electrical installation for Government buildings and tenders received from the Electrical Engineer (General) were scrutinized and commented or technicially sanctioned. The branch continued to discharge the functions of the Central Purchsaing agent of the department. Requirements of materials, spares and equipment needed for operation and maintenance of the power systems were consolidated and orders placed. The Civil and Hydraulic Division of this branch continued to be fully occupied with the preparation of designs, specifications, reports and estimates for civil works and scrutiny of tenders therefor.

Technical reports and estimates were prepared for the following important works :—

	Estimated initial cost in lakhs.
	Rs.
1 Extension of supply to South Kanara from Mysore ..	48·32
2 Cuddapah Thermal Scheme	102·46
3 Kurnool Thermal Scheme	141·66
4 Thermal Station at Nandyal	11·28
5 Extension to Rayadrug from Bellary	6·80
6 Extension to Kakinada Generating station . .	10·126

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In view of the prevailing high prices of plant and machinery, the estimates of the following sanctioned schemes were revised :—

	Revised Estimates. RS. IN LAKHS.		RS. IN LAKHS.
1 Moyar Scheme	364·201	rising to	463 90
2 Pykara III stage Extensions	326·35	do.	489·35
3 Papanasam II stage Extensions ..	285·5	do	336·00
4 Madras Mettur Inter-connexion ..	123 94	do.	218·00
5 Madras Plant Extensions including the installation of transportable power sets at Basin Bridge.	I stage 265·80 / II stage 189·50	Total ..	455·3
6 Machkund Hydro-Electric Scheme ..	1,024 50	rising to	1,318·11

The following were the more important specifications issued during the year :—

(1) Machkund Scheme—Generating plant, indoor and outdoor switchgear and transformers.

(2) Nellore Scheme—Indoor and outdoor switchgear.

(3) Sub-station equipment and transmission lines relating to Mathurai—Rajapalayam—Tenkasi, Mathurai—Sivaganga, Tanjore—Mayuram—Chidambaram, Papanasam—Tirunelveli—Kayattar, Negamam—Pollachi, Kancheepuram—Chingleput—Arkonam and West Godavari extensions.

(4) Step up transformers for diesel power stations.

(5) Control and repair house at Singarappet and Vijayavada.

During the year under review contracts were awarded for a number of works with a total value of over Rs. 2 crores as detailed below :—

	RS. IN LAKHS.
1 Sub-station equipment for Erode-Salem, Erode-Tiruchirappalli-Dalmiapuram and Satyamangalam Extensions.	18·99
2 Transmission lines for—	
(a) Erode-Tiruchirappalli and Erode-Salem 110 K.V. line.	12·46
(b) Tiruchirappalli-Dalmiapuram, Tanjore-Mayuram and Papanasam-Kayattar.	18 04
(c) Mathurai-Tirumangalam, Rajapalayam-Tenkasi, Mathurai-Sivaganga and Negamam-Pollachi.	11·76
3 Pykara III stage Extensions-Generators, Indoor and outdoor switchgear, water wheels transformers and high pressure valves.	35·17
4 Machkund Scheme-Haulage track materials, Tunnel and Surge tank.	46·2
5 Basin Bridge 'B' Station—	
(a) Natural draft cooling towers	6·05
(b) Piling required for cooling towers and control block.	1·08
(c) 11 K.V. and lower voltage cables	4·89
6 Madras Thermal Station—	
II stage Extensions—	
Two 80,000 lb. hour boiler and one 15,000 K.W. turbo set.	58·28

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Materials for operation and maintenance and for small extensions to the value of about Rs. 126 lakhs were ordered during the year.

About 220 extension proposals including Firka Development Schemes aggregating Rs. 75 lakhs were scrutinized for sanction.

The following new schemes were studied and the preliminary reports were in the drafting stage :—

(1) Tungabhadra Project.
(2) Periyar Project.

There was no improvement in the supply position of materials especially steel. The feasibility of making use of reinforced cement concrete poles, etc., was under study.

To cope with the increasing work, another electrical division was sanctioned for this branch.

The stock verification work in general charge of a Stores Superintendent was continued to be done under the administrative control of this branch.

This branch was also entrusted with the work of organizing the Electricity Department stall in the All-India Khadi and Swadeshi Exhibition held at Teynampet during December 1948. The stall attracted large crowds every day till the end and appeared to have created a good impression among the public.

Operating Systems Branch.

31. *General.*—This Branch comprises five operating systems, three, viz., Pykara, Mettur and Papanasam under the control of the Chief Operation Engineer (South) and two, viz., Madras and Andhra under the control of the Chief Operation Engineer (North). Operation and maintenance of all the systems was satisfactory. Increase in demand on the power systems and revenue receipts was recorded. Due to shortage of generating capacity in the hydro systems, rapid growth of load, and partial failure of the North-east Monsoon restrictions regarding working hours of existing services and ban on connexion of new low tension industrial loads had to be reintroduced in the hydro areas in December 1948. All the three hydro systems are now running continuously in parallel, Pykara and Papanasam giving relief to Mettur. The erection of spill-way gates at the Thambraparni Dam was completed enabling storage of water to the full capacity of the reservoir. Two 2,500 KW. transportable power sets were commissioned at the Basin Bridge station to relieve the power shortage in the Madras area; the first set in the first week of April 1948 and the second one in the first week of June 1948. Rationing of electricity continued to be operative in the Madras, Vijayavada and Kakinada systems. The war costs surcharge of 10 per cent as also the additional 10 per cent surcharge on industrial supplies was continued in the hydro area during the year under review. A war costs surcharge of 10 per cent on low tension supplies was made operative in the Madras area from December 1948. In view of the abnormal increase in fuel costs the surcharge policy in the Andhra system was modified and instead of the 20 per cent war costs surcharge on all supplies until then in vogue, the fuel surcharge was reintroduced in the case of high tension consumers and war costs surcharge of 20 per cent continued only on low tension consumers from June 1948.

The Cuddapah, Kollegal and Valparai undertakings were taken over from the respective licensees during the year. The management of the Cuddapah

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undertaking was under the Superintending Engineer, Madras System while the Kollegal and Valparai distributions were added to the Pykara system.

The coal position in the thermal area, especially at Vijayavada, caused anxiety in the middle of the year on account of the disturbed conditions in Hyderabad State. Adequate supply of coal from elsewhere was obtained and stocked and the situation satisfactorily met. This arrangement, however, resulted in considerable increase in coal costs, due to supply having had to be obtained by sea-*cum*-rail route and consequential high increase in the fuel surcharge on the high tension consumers in the Andhra system.

To cope with the increased commercial work two commercial divisions, one for Mettur system and one for Pykara system were formed with headquarters at Mettur and Coimbatore.

Detailed report on the activities of the different operating systems is furnished below :—

Pykara System.

32. *General.*—The year under review was the sixteenth year of operation of the Pykara System. The eighth 5,000 KVA 110 KW/22–11 KW transformer at the Coimbatore Receiving Station was satisfactorily commissioned during the year. Kollegal Panchayat Undertaking was taken over and was changed over to Mysore supply on 1st October 1948. The Valparai distribution that was being operated by the Anamalais Planter's Association by a sanction under section 28 of the Indian Electricity Act was taken over from 1st July 1948. Supply of power was given to the Cochin Government for the construction requirements of the Poringalkuthu Hydro-Electric Scheme.

Due to partial failure of the North-East Monsoon again this year maximum relief was afforded by Pykara to Mettur and Papanasam systems, the three systems running continuously in parallel.

Two of the three 2,000 KVA transformers at Singara Power-house failed on 11th June 1948 while in service due to faulty design. One of them was rebuilt locally using the available healthy coils and put back into service. The other will be repaired as soon as the new modified coils ordered are received.

The peak load of the system reached 35,600 KW as against 32,050 KW in the last year. The Pykara Power-house peak was 43,800 KW with all the three systems in parallel and Pykara giving relief to Mettur and Papanasam.

The units generated during the year amounted to 208.2 millions against 155·9 millions in last year.

The units distributed and sold were 195·8 millions compared to 143·36 millions last year.

The revenue earned was Rs. 71.78 lakhs as against Rs. 57.77 lakhs in the previous year.

Supply of power was extended to 48 new villages and 782 pump-sets during the year.

The total connected load was 95,190 KW as against 82,976 KW in the previous year.

Consequent on the failure of the 2,000 KVA transformers at Singara Power-house supply to the Crodite Factory (600 KW) was changed over from 22 KV to 11 KV and continued so for the rest of the year.

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33. *Water conditions.*—The rainfall figures for the year under review and the previous year are given below :—

	1947–48. INCHES.	1948–49. INCHES.
Mukurti	71·41	95·34
Glen Morgan	65·64	75·82

Water conditions at Mukurti were satisfactory though the north-east monsoon was not very effective.

34. *Load development.*—Due to the connecting up of a large number of agricultural services and domestic and industrial services, the demand on the generating station increased. A statement of the growth of demand since the commencement of operation of the system is furnished below :—

Year.	Peak load in K.W.	Energy generated in millions of units.	Gross receipts (including miscellaneous receipts). Rs. IN LAKHS.
1933–34	3,150	10·9	4·4
1934–35	6,600	30·0	10·5
1935–36	10,100	50·3	16·3
1936–37	14,900	75·6	24·0
1937–38	17,200	82·4	27·6
1938–39	17,900	84·3 *plus* 16·18*	31·0
1939–40	24,900	114·7 ,, 3·81*	38·5
1940–41	26,200	136·13 ,, 0·67*	42·7
1941–42	28,900	156·57 ,, 0·025*	49·4
1942–43	30,600	165·14 ,, 2·38*	52·2
1943–44	31,000	165·74 ,, 7·78*	56·6
1944–45	30,300† / 26,600‡	158·59 ,, 2·86*	49·7
1945–46	38,300† / 27,150‡	173·11 ,, 1·27* 3·58§	53·0
1946–47	37,800† / 27,700‡	145·0 ,, 3·4* 2·1§	52·6
1947–48	38,600† / 32,050‡	155·9 ,, 7·2* 1·2§	57·77
1948–49	42,800† / 35,600‡	208·2 ,, 9·09* 2·70§	71·78

* Represents units purchased from Mettur.
† Station peak while giving relief to other systems.
‡ Peak load for the system load only.
§ Represents units purchased from Papanasam.

35. *Financial results.*—The following figures show the financial working of the system for 1948–1949 :—

Particulars.	Amount. Rs.
1 Capital outlay including arrears of interest ..	4,10,28,933
2 Gross revenue	71,77,627
3 Operation and maintenance excluding suspense.	18,44,446
4 Depreciation fund	9,05,884
5 Special Reserve fund	3,62,353
6 Total expenses (items 3 plus 4 plus 5)	31,12,683
7 Net revenue (item 2 minus item 6)	40,64,944

The gross revenue earned from Kollegal Distribution Scheme was Rupees 12,004.

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36. *Connected load.*—The table gives the connected load of the system at the end of the year under different categories :—

Serial number and description of load	Number of consumers.	Connected load in KW.
I Industrial high voltage supplies—		
(*a*) Textiles	37	24,674
(*b*) Cement works	1	4,495
(*c*) Mines	1	227
(*d*) Oil and industries	5	492
(*e*) Cordite Factory	1	1,350
(*f*) Tea estates	40	4,749
(*g*) Miscellaneous	16	2,233
(*h*) Licensees	4	7,249
(*i*) Municipalities	11	18,349
II L.T. Distributions—		
(*a*) Industrial supplies	431	6,427
(*b*) Irrigation and agriculture	4,535	20,333
(*c*) Domestic heat power and light	7,947	4,166
(*d*) Commercial heat power and light	1,643	203
(*e*) Public lighting	43	122
(*f*) Public water-works and sewerage pumping	..	5
(*g*) Miscellaneous	1	106
Total	14,766	95,190

The total connected load at the end of the year was 95,190 KW. against 82,976 KW. in the previous year registering 15 per cent increase.

37. *Power-house.*—The total number of units generated was 208·2 millions as against 155·9 millions last year. This figure is exclusive of 9·09 millions purchased from Mettur System and 2·70 millions purchased from Papanasam system, units sold to Mettur and Papanasam being 27·38 millions and 17·04 millions respectively. The units distributed and sold during the year were 195·80 millions as against 143·36 millions of last year.

38. *Penstock, Civil and Hydraulic Works.*—Providing barriers above anchor 18 and special protection work on western side of A 31, were in progress.

The rewelding of the buckets of runners of machines Nos. 4 and 5 at Singara Power-house was satisfactorily completed.

39. *Glenmorgan Power-house.*—The power-house was maintained in condition. The 375 K.V.A. stepup transformer would shortly be despatched to the Andhra System where it is required.

40. *Transmission lines.*—Transmission and distribution lines constructed during the year and the total mileage at the end of 1948–49 were as below :—

Voltage.	Constructed during 1948–49.		Total at the end of 1948–49.	
	Single circuit in miles.	Double circuit in miles.	Single circuit in miles.	Double circuit in miles.
110 K.V.	..	..	..	49
66 K.V.	..	..	93	215
33 K.V.	..	..	..	..
22 K.V.	1 3·5	2·5	445·2	98·3
11 K.V.	— 73·5	..	533·2	43·00

The route length of low tension lines at the end of 1948–49 was 1252·81 miles against 1,139·345 miles at the end of 1947–48.

Four miles of high tension lines (13·2 K.V.) and 12·25 miles of low tension lines were taken over along with the Kollegal Distribution Scheme.

The transmission and distribution lines were maintained satisfactorily.

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41. *Extra High Tension Substations and High Tension Substations.*—The number of extra high tension sub-stations including the power-house with aggregate transformer capacity is given below :—

At the end of 1946–47—6 Nos.—119,180 K.V.A.
At the end of 1947–48—8 Nos.—135,180 K.V.A.
At the end of 1948–49—8 Nos.—140,180 K.V.A.

One of the 500 K.V.A. transformers at Madukkarai substation was overhauled and recommissioned.

The 1,000 K.V.A. booster from Cambodia structure was transported and re-erected at Palghat sub-station to improve voltage regulation at that end.

42. *Coimbatore Receiving Station.*—The station peak was 38,660 K.W. during April 1948 when affording relief to other systems.

The peak load on Coimbatore was 37,530 K.W. in June 1948.

The 11, 22 and 66 K.V. peaks at Coimbatore were :—
11 K.V. peak—15,290 K.W. in January 1949.
22 K.V. peak—9,800 K.W. in December 1948.
66 K.V. peak—17,400 K.W. in February 1949.

Fixing balancing pipe and locally made gauges for the 6 Ferranti transformers at Coimbatore was completed.

The eighth 5,000 K.V.A. 110 K.V./11-22 K.V. transformer was commissioned satisfactorily.

The core and coils of No. 6-5,000 K.V.A. transformer were examined as an unusual noise was heard from inside. The noise was traced to a slack bolted connexion inside and the defect rectified.

43. *Distributions.*—The number of distribution transformers erected during the year and the aggregate capacity is furnished below :—

Number of distribution transformers erected during the year.	Aggregate capacity of transformers including increase in capacity.	Total number of distribution transformer in service at the end of 1948–49.	Aggregate capacity of transformers.
61 Nos.	3,531·0 K.V.A.	540 Nos.	29,073·5 K.V.A.

44. *Industrial Extensions.*—There was no labour unrest during the year under review and since the re-opening of the mills after the general lockout in March 1948, many mills began working a third shift.

The following mills were under construction :—
(1) Kadiri Mills, Odderpalayam.
(2) Premier Mills, Pulankinar.

High tension supply was given to the following industries :—
(1) The Argus Engineering Company, Peelamedu.
(2) The Mailoor Estate, the Nilgiris.
(3) The Coimbatore Oil Mills, Kinathukkadavu.
(4) The Ambarampalayam Water Works, Pollachi.
(5) The Radhakrishna Oil Mills, Limited.
(6) The K. M. M. Khadhar Mohideen Rowther and Sons, Dindigul.
(7) The Textool Company, Ganapathi.
(8) The Naduar Estate.
(9) The Sholayar Estate.
(10) The Karthikeya Mills.
(11) Poringalkuthu Scheme—Cochin Government.

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All works were completed and supply will be given in the following cases as soon as the water shortage emergency is over :—

(1) Devarashola Estate, the Nilgiris.
(2) Kotada Estate, the Nilgiris.
(3) Mayfield Estate, the Nilgiris. .
(4) Craigmore Estate, the Nilgiris.
(5) Jaya Oil Mills, Pollachi.
(6) Asher Industries, Tiruppur.
(7) Abbassiya Oil Mills, Dindigul.
(8) Ramakrishna Industries.
(9) National Manure Works, Bodipatty.

Extensions for supply of power to the following industries were in progress :—

(1) Agro Industries.
(2) Waverly Estates.
(3) Amer Hind Manufactures.
(4) Jaganatha Ginning Factory.
(5) Central Studios.
(6) New Katary Estates.

45. *Textile Mills.*—Increase in demand was permitted to Kaleswara, Murugan and Cambodia Mills who had added machinery. Jalayakshmi Mills who had stopped taking power since 10/47 resumed supply in 6/48.

46. *Cement Works.*—Madukkarai Cement Works which continued to be the single largest consumer in the system will be utilizing the permitted additional demand of 1,400 K.V.A. from July 1949.

47. *Tea Estates.*—As already mentioned supply was given to the Naduar and Sholayar tea estate. Small additional loads were permitted to a few factories.

48. *Commercial activity.*—To cope with the rush of applications for new services and with the increased construction work a commercial *cum* construction division was formed. High priority was given to rural extensions, specially to agricultural pumps.

49. *Agricultural services.*—The number of agricultural services connected during the year under report was 782 with a connected load of 3,038 against 518 numbers with a connected load of 2,255 K.W. in 1947–48.

Further progress was hampered to a large extent by dearth of line materials and skilled staff.

50. *Rural Industries.*—Forty-eight new villages were electrified during the year. Sixty-nine rural industries with a connected load of 725 K.W. were connected up during the year.

51. *Firka Development.*—Progress during the year on firka development scheme is detailed below.—

Palladam Firka.—The following villages involving seven schemes were newly connected up during the year :—

(1) Mellegoundanpalayam.
(2) Anupatti.
(3) Kasha Ayyampalayam.
(4) Sennipalayam.
(5) Sukkampalayam.
(6) Ganapathipalayam.

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Avanashi Firka.—In this firka four schemes were completed during the year. Several schemes have been submitted for sanction and of these, two costing Rs. 49,860 included supply to 18 pumps, 4 industries and 18 street lights in Annur Panchayat Board.

Kundah Firka.—The following schemes have been sanctioned and completed during the year :—

(1) Devashola Tea Factory H.T. supply.
(2) Melur-Manjacombai supply to tea factories.
(3) H.T. supply to tea factory at Craigmore.
(4) H.T. supply to Katery New Tea Factory.

52. *Conversion Fund.*—Applications for hire purchase facilities are being received now after a lull for several years and action is being taken on such applications to help the agriculturists to get their requirements.

53. *Meter relay test and special maintenance.*—As meters in large numbers became available the system of giving service connexions with unmetered supply was stopped. The special maintenance subdivision continued to be busy as usual.

54. *Interruptions and breakdowns.*—There were 35 major interruptions and outages, but none of serious consequence. All the interruptions were attended to promptly.

55. *Stores, Accounts, Audit and Central Office.*—The number of stores in the system during the year was ten including the Central Stores at Coimbatore. A new store was opened at Aravankadu during the year. The total reserve limit of stock for 1948–49 was Rs. 76·00 lakhs against Rs. 61 lakhs for 1947–48.

The stores were inspected periodically by the Stores Superintendent. The stock verifier verified the following stores :—

(1) Tiruppur.
(2) Udamalpet.
(3) Theni.
(4) Coimbatore Central Stores.

The Palni Stores was shifted to Pollachi.

Arrears accumulated due to all-round increase in work and to clear them off two arrears clearance sections were engaged.

Proposals for reorganization of section and subdivisions in the Coimbatore and Udamalpet Divisions awaited sanction of Government.

56. *Programme of work for* 1949–50.—(i) Erection of Uppatti, Kuthumunda and Manantoddy sub-stations.

(ii) Commencement of the erection of Pollachi-Negamam 66 K.V. extensions.

(iii) Overhaul of the auto-transformers at Coimbatore receiving station.

(iv) Completion of the balance of work on change over of Palghat supply to 22 K.V.

(v) Changing over of the Kodaikanal spur line to 22 K.V.

(vi) Construction of the line between Pollachi and Madukkarai feeders.

(vii) Reinforcement of the Madukkarai feeders to afford additional supply to cement works.

(viii) Erection of an oil circuit breaker at Sengalipalayam.

(ix) Construction of a temporary sub-station at Satyamangalam to provide supply to Lower Bhavani Project.

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(x) Target for pump sets for the year, viz., 1,720, to be achieved.

(xi) Erection of the 66 K.V. sub-stations at Chengapalli, Somanur, etc., for which proposals have been sent for sanction.

(xii) Construction of various extension schemes sanctioned.

Mettur System.

57. *General.*—The year under review was the twelfth year of operation of the system. There was a phenomenal rise in the peak of the system as during last year, necessitating the running of all the four machines during peak load hours. Water conditions improved gradually with the onset of the south-west monsoon but again due to the feeble north-east monsoon and the extended period of irrigation discharge at the dam, conditions deteriorated resulting in the imposition of restrictions on new supplies. Maximum possible relief was obtained from the Pykara System. Due to shortage of line materials and inadequacy of transformer capacity at many of the sub-stations load development was retarded to an appreciable extent. The 110 K.V. line inter-connecting Madras and Mettur has been temporarily charged at 66 K.V. and a temporary 66 K.V. sub-station is being arranged at Kancheepuram to relieve the power position in the Arkonam-Kancheepuram areas to a certain extent.

The demand for power is so great and the load development so rapid that the generating capacity of the Mettur Power House would soon be inadequate and further extension of power supply has to await the completion of the Moyar Scheme and of the Papanasam Extension and Mathurai Thermal Schemes.

The peak load of the system reached 35,800 K.W. and units generated 156·8 millions as against 29,700 K.W. and 135·70 millions last year. 27·38 million units were purchased from Pykara. The station peak reached 39,600 K.W. on 2nd December 1948 when affording temporary relief to Pykara. The revenue earned was Rs. 62·05 lakhs as against Rs. 48·14 lakhs in the previous year. Thirty-five new villages were electrified and 617 agricultural services were connected up during the year. The total connected load on the system was 114,784 K.W. as against 96,601 K.W. last year.

58. *Water conditions.*—The reservoir level was 720·3 feet on 31st March 1948 and gradually rose to 741·4 feet on 18th June 1948, the date of commencement of irrigation discharge. Due to the vigorous onset of the south-west monsoon the lake was full by 14th August 1948 and continued to be so till 9th September 1948. On account of the north-east monsoon being feeble and due to the irrigation discharge being continued up to 24th February 1949 the lake was depleted rapidly and the water reached the level of 718·4' feet M.S.L. on the date of closure of irrigation discharge, involving introduction of the following restrictions :—

Staggering of mill holidays, cutting off L. T. small power loads during peak load hours and stopping of fresh service connexion to industrial loads.

Further restriction by way of cut in consumption had also been planned for adoption when necessary.

59. *Mettur Power House.*—The operation and maintenance of the Power House was satisfactory and there were no major interruptions. Mettur and Pykara Systems were run in parallel from December onwards with a view to take full advantage of the irrigation discharge at Mettur and conserve water at Mukurti. Later the Mettur lake level fell and maximum relief was obtained from Pykara to meet the system requirements.

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With a view to avoid the recurrence of feeder cable troubles similar to those in December 1947, separate industrial feeder cubicles were commissioned both on the eastern and western side and the existing feeder control cubicles regrouped suitably.

Annual overhaul of all the machines was carried out.

The third 2,000 KVA 11/22 KV transformer with its Oil Circuit Breaker was commissioned in June 1948 in the Salem 22 KV yard.

60. *Load Development.*—The table below indicates the rapid growth of load and revenue since the commencement of operation of the system :—

Year.	Peak load in K.W.	Units generated in millions.	Gross revenue. Rs. in lakhs
1937–38	5,700	17·4	3·45
1938–39	7,700	44·0	11·93
1939–40	10,900	46·49	13·34
1940–41	12,300	60·42	18·19
1941–42	14,000	71·67	21·75
1942–43	* 15,300	81·45	24·00
1943–44	† 16,000	97·32	27·27
1944–45	‡ 18,915	104·92	30·78
1945–46	§ 19,400	88·70 plus 23·68	34·39
1946–47	‖ 23,850	96·24 plus 17·85	39·47
1947–48	¶ 29,700	135·70 plus 13·81	48·14
1948–49	** 35,800	156·8 plus 27·38	62·05

* 23,400 with relief to Pykara.
† 28,200 do.
‡ 26,120 do.
§ 27,200 with relief to Pykara.
‖ 35,000 do.
¶ 36,700 do.
** 39,600 do.

The Dalmia Cement Factory continued to be the largest single industrial consumer in the System.

Proposals to meet the additional load required by the Dalmia Cement Factory consequent on the expansion of their factory were finalised and the additional plant of the factory was expected to be commissioned by about June 1949.

61. *Financial results.*—The table below gives the financial working of the system for the accounting year—

	Rs. in lakhs.
Capital outlay including arrears of interest to end of the year	3,25,75,553
Gross revenue	62,05,001
Operation and maintenance expenditure exc'uding Depreciation and Special Reserve	19,97,548
Depreciation Fund	7,05,047
Special Reserve Fund	2,82,019
Total expenses (items 3 to 5)	29,84,614
Net revenue	32,20,387

62. *Connected load.*—The connected load of the system under the different categories was as follows :—

Description of load.	Connected load in K.W.
I. Industrial H.T. supplies—	
(*a*) Textiles	1,637
(*b*) Chemicals	2,597
(*c*) Metal and metallurgical	310
(*d*) Sugar	333
(*e*) Oil	165
(*f*) Mines	40
(*g*) Municipalities	6,827
(*h*) Licensees	73,21)

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Description of load.	Connected load in K.W.
II. Industrial L.T. supplies	7,402
III. Irrigation and agriculture	12,185
IV. Domestic heat and power	4,371
V. Commercial	931
VI. Public water-works and sewage pumping	111
VII. Street lighting	191
VIII. Railways	3,294
IX. Miscellaneous	1,180
Total ..	114,784

The total at the end of the year was 114,784 KW against 96,501 KW in the previous year, registering 19 per cent increase.

63. *Transmission lines.*—Transmission and distribution lines constructed during the year and the total mileage at the end of 1948–49 were as below : —

Voltage.	Constructed during 1948–49.		Total at the end of 1948–49.	
	Single circuit in miles.	Double circuit in miles.	Single circuit in miles.	Double circuit in miles.
66 KV	..	..	188·5	228·5
33 KV	25·5	..	204·2	..
22 KV	35·5	..	410·65	..
11 KV	23·0	..	455·0	1·75

The total route length of L.T. lines as on 31st March 1949 was 726·5 miles.

Except for some locations in the Mettur-Erode Section the reinforcement of the Mettur-Singarapet and the Mettur-Erode 66 KV line for 110 KV operation was completed. Deviation and progress of double circuit telephone line between Mettur and Singarapet was in progress.

About thirty miles of 33 KV line were constructed between Kodambakkam and Kadambattur and reinforcement of the Arkonam-Kadambattur 11 KV line to 33 KV was done to obtain relief from Madras System during low water conditions at Mettur and emergencies.

For effecting supply to the lignite mines at Neiveli about 12 miles of 22 KV line were constructed from Vridhachalam.

The Kuppam 33 KV line was completed up to Kuppam and initially charged at 11 KV due to non-receipt of 33 KV pin insulators, switchgear, etc.

Changeover of Mettur Local supply from 3-3 KV to 11 KV was in progress.

To relieve the power shortage and improve supply conditions in the Kancheepuram-Arkonam areas, the 110 KV Singarapet-Madras line was initially charged at 66 KV up to Kancheepuram for energising the temporary 66/33 KV sub-station with two 1,250 KVA transformers.

64. *E.H.T. and H.T. Sub-stations.*—The following is a list of the existing sub-stations and their aggregate transformer capacity :—

Serial number and name of sub station.	Available transformers.		Aggregate capacity.	
	NOS.	K.V.A.	K.V.A.	
1 Erode	3	1,000	3,000	
2 Karur	3	750	2,250	
3 Tiruchirappalli	3	2,500	7,500	11,500
	2	2,000	4,000	
4 Tanjore	4	750	3,000	

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Serial number and name of station.	Available transformers.		Aggregate capacity.	
	NOS.	K.V.A.	K.V.A.	
5 Papanasam	3	500	1,500	
6 Tiruvarur	2	2,500	5,000	
7 Nagapatnam	2	2,500	5,000	
8 Singarapet	2	500	1,000	
9 Kariamangalam	2	250	500	
10 Tiruppattur	1	500	500	750
	1	250	250	
11 Ambur	2	500	1,000	
12 Vadakathipatti	2	500	1,000	
13 Vellore	2	1,250	2,500	
	1	750	750	4,250
	2	500	1,000	
14 Chittoor	2	250	500	
15 Pakala	2	250	500	
16 Ranipet	2	250	500	600
	1	100	100	
17 Kaveripauk	2	250	500	600
	1	100	100	
18 Kancheepuram	5	250	1,250	
19 Arkonam	2	500	1,000	1,100
	1	100	100	
20 Tiruvannamalai	3	500	1,500	1,750
	1	250	250	
21 Polur	2	250	500	600
	1	100	100	
22 Arni	2	500	1,000	
23 Vettavalam	2	250	500	600
	1	100	100	
24 Villupuram	4	1,750	7,000	8,250
	1	1,250	1,250	
25 Mettur Power-house	3	2,000	6,000	
26 Kadambattur	2	250	500	
Total ..			63,000	

One new 33/11 KV sub-station was added during the year at Kadambattur with an installed capacity of 500 KVA.

By providing necessary parallelling arrangements and interchanging transformers within the system, increase in effective transformer capacities was effected at the following sub-stations :—

1 Kancheepuram ..	1 Number	..	250 KVA.
2 Vellore	1 „	..	750 KVA.
3 Kariamangalam ..	1 „	..	250 KVA.
4 Kaveripauk	1 „	..	250 KVA.
5 Tiruvannamalai ..	1 „	..	500 KVA in place of 250 KVA
6 Ambur	1 „		500 KVA.
7 Villupuram	1 „	..	1,250 KVA Under commission.

Transformer control oil circuit breakers for the three numbers 1,750 KVA. transformers were commissioned at Villupuram sub-stations.

The 110/66 KV Air Blast Circuit Breaker supplied on trial and approval basis by Messrs. The English Electric Company was installed at Erode sub-station on 26th September 1948. The Breaker was working satisfactorily.

Temporary 66 KV sub-station at Kancheepuram with two numbers 1,250 KVA transformers was completed. One more 1,250 KVA unit which had also been received at site will be connected for 11 KV supply.

65. *Distribution.*—Three hundred and forty-one numbers distribution transformers with an aggregate capacity of 18,723 KVA were in service at the end of the year as against 307 numbers and 16,113 KVA last year.

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66. *Commercial activities.*—To co-ordinate the commercial and construction activities of the system a commercial *cum* construction division was formed in October 1948 with headquarters at Mettur Dam.

The following table gives the number of schemes scrutinized and sent up or sanctioned by the Superintending Engineer, Mettur Electricity System :—

Name.	Number of schemes sent up.	Number of services.			Load (in K.W.)			Estimate.
		Agricultural.	Industrial.	House service connections.	Agricultural.	Industrial.	House service connections.	Amount. Rs. IN LAKHS.
Major works ..	43	1,658	121	1,773	11,108	3,560	433·2	66·08
Minor and petty works.	195	157	84	310	859	503	156·5	3·6

Due to inadequate transformer capacity at several sub-stations, investigation of many schemes had to be deferred. A priority list was maintained for investigation of new schemes, and it was being reviewed from time to time and kept up to date.

67. *Agricultural services.*—Six hundred and seventeen numbers agricultural services totalling 2,313 KW were connected up during the year bringing the total number to 2,560 numbers and 12,185 K.W. Besides these, connexion was extended to 264 wells but parties were not ready to take supply for want of pumps of accessories.

68. *Rural industries.*—Ninety-nine numbers industrial services totalling 965 KW connected during the year bringing the total to 594 and the total connected load to 8,135 KW.

69. *Firka development.*—Details of the progress made in respect of firka development schemes are furnished below :—

1 Kalasapakkam.	A scheme at an estimated cost of 1·2 lakhs sanctioned in G.O. No. 1805, dated 4th November 1945, could not be taken up. Revised sanction of Government including approval to meet deficit in revenue from the firka Fund was accorded in G.O No. 256. Public Works, dated 16th March 1949, for Rs. 1,48,620.
2 Kadambuliyur.	Sanction of Government awaited.
3 Nagari ..	Do.
4 Veerapandi ..	Sanction of Government awaited for supply to the whole firka. A restricted scheme at a cost of Rs. 2·2 lakhs for supply to Kodalampatti, Neikarapatty, etc., has been sanctioned in G.O. Ms. No. 4891, dated 14th December 1948.
5 Vellakoil ..	A restricted scheme for supply to nine villages in this area at a cost of Rs. 8 lakhs was finalised. A scheme for supply to all the villages in the firka was under preparation.
6 Puliankurichi.	Investigation complotd and scheme under preparation.
7 Tiruvallur ..	A restricted scheme costing Rs. 1,30,800 has been sanctioned in G.O. No. 987, dated 3rd August 1947. Supply was effected in certain cases and work in other cases proceeding.

70. *Conversion Fund.*—No loan was sanctioned during the year. Twenty-one applications were under examination.

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71. *Meter and relay tests and special maintenance.*—The following main items of work were done by the Meter and Relay Tests subdivisions :—

Single and 3-phase meters tested and repaired	7,815
H.T. meters tested and repaired	79
Relays tested	245
Replacement of L.T. meters by M.R.T.	1,996

The following important works were carried out by the Special Maintenance subdivision :—

(1) Two numbers 1,250 KVA 66/33-11 KV. power transformers assembled and tested for Kancheepuram sub-station.

(2) Ninteen numbers power tansformers totalling 12,500 K.V.A. were overhauled and commissioned.

(3) One number 1,000 KVA booster was assembled and tested.

(4) Fifty-one numbers distribution transformers (3,500 KVA.) were assembled ready for service.

(5) Forty-one numbers old distribution transformers (2,000 KVA.) were overhauled and reconditioned.

(6) Four numbers damaged transformers (503 KVA.) were repaired and made fit for service.

72. *Interruptions and breakdowns.*—The only major breakdown was on Tiruvannamalai-Villupuram 66 KV feeder for 8½ hours due to snapping of power conductors.

72. *Stores, accounts, audit and Central office.*—The third cycle of verification of the Mettur Central Stores was completed while that of the sub-stores was nearing completion. The reserve limit was raised from Rs. 53·61 lakhs to Rs. 66·79 lakhs. Periodical inspection of sub-stores was conducted by the Stores Superintendent.

To meet the considerably increased work in the Central office, proposals for additional staff were submitted.

74. *Workshops.*—The total outturn of the workshops during the year under review was Rs. 11.46 lakhs as against Rs. 9.52 lakhs in the previous year. The number of employees was 498 maximum and 403 minimum with an average attendance of 448. Special structures for parallelling at Kancheepuram, Arkonam, Villupuram, Tanjore and Kadambatur were fabricated.

Manufacture of towers for Vijayawada-Rajahmundry extensions was completed. Orders for the following lines were received and the fabrication was in progress :—

(1) Erode-Tiruchirappalli 110 KV line.

(2) Erode-Salem 110 KV line.

(3) Tiruchirappalli-Dalmiapuram 66 KV line.

(4) Papanasam-Kayattar 33 KV line.

A technical training centre for the training of Construction Foremen was sanctioned by Government. Five batches totalling 64 men had received training at the end of the year.

75. *Administration.*—As already stated, a Construction-*cum*-Commercial Division was formed at Mettur. An additional sub-division for operation and maintenance was formed at Kancheepuram by bifurcating the unwieldy Vellore sub-division and redistributing the sections in the Vellore division.

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76. *Programme for* 1949–50.—Besides extensions for agricultural and industrial services and firka development schemes, the following important works are programmed for 1949–50 :—

(1) Workshop expansion.

(2) Raising the insulation of Mettur Power-house to 110 KV.

(3) Transport and erection of 6,000 KVA. auto-transformers at Erode and Singarappet.

(4) Erection of mulsifyre protection at Mettur Power-house.

(5) Raising Kancheepuram-Chingleput insulation to 33 KV and construction of Wallajabad and Chingleput sub-stations.

(6) Increasing power transformer capacity in various sub-stations and affording increased supply to licensees and cement factory at Dalmiapuram.

(7) Commissioning the temporary sub-station at Kancheepuram with 3 numbers 1,250 KVA transformers.

(8) Preliminary work in connexion with Mayuram-Chidambaram 33 KV line and erection if materials supply position permits.

(9) Extending 33 KV supply to Kuppam, erection of the 33/11 KV sub-station at Kuppam and completion of parallelling arrangements at Tiruppattur.

(10) Construction of additional staff quarters at Mettur Dam.

Papanasam System.

77. *General.*—The year under review was the fifth year of operation. Supply was maintained satisfactorily and inasmuch as the total load on the system exceeded the generating capacity of the powerhouse, necessary relief was obtained from Pykara during the peak load hours by running the two systems in parallel. Due to deterioration in water conditions at Mettur, all the three systems were run in parallel for considerable periods.

Spillway gates were erected on the Thambraparni Dam enabling storage of water to the full capacity of the reservoir.

Supply of power was effected to the water mills of Messrs. Harvey and Company at Ambasamudram.

The peak load of the system reached 18,500 K.W. as against 15,000 K.W. last year. This included a seasonal temporary supply of 2,150 K.W. to the Cochin and Travancore Governments.

The number of units generated during the year was 71·768 millions against 64.62 millions last year. 17.045 million units were purchased from Pykara and the total units distributed and sold (including sales to Pykara) were 76·72 millions.

The gross revenue earned during the year was Rs. 29·15 lakhs as against Rs. 24.8 lakhs in the previous year. Thirty villages were electrified during the year under review and 119 agricultural pumpsets connected up.

78. *Water conditions.*—Rainfall figures for the year and the previous year in the catchment areas are given below :—

	1947–48. INCHES.	1948–49. INCHES.
Papanasam Dam camp	45·15	64·40
Papanasam camp	39·54	52·20

The erection of the spillway gates enabled storage of water in the reservoir to its full capacity. The highest water level reached during the year was 868 feet on 22nd March 1949 as against 843·15 feet reached in 1947–48.

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Though the restrictions imposed last year were withdrawn early in July 1948 due to the setting-in of the south-west monsoon, fresh restrictions had to be enforced from January 1949 due to the deteriorating water conditions at Mettur and as the total power demand of the three systems exceeded the aggregate generating capacity of the three power stations.

79. *Power-house, Dam and Civil Works.*—All the three machines in the power-house were maintained in order and were working satisfactorily.

The A.C. and D.C. Turbine bearing oil pumps were overhauled, cleaned and refitted. The bearing of the under speed relay of the machine No. 3 was removed as it was worn out. A new housing for the bearing was cast and put into service.

Special load tests on the capacity of the low pressure pipe-line were conducted and it was seen that the safe permissible load could be only 14,000 K.W. for one low pressure pipe line.

The pipe lines were maintained satisfactorily. The G and K valve at Thambraparni Dam was converted into a noseless type and it is giving satisfactory service.

The two power transformers 7,250 K.V.A. (Nos. 2 and 3) which showed poor insulation resistance valves were reconditioned and put back into service. The No. 1—2,000 K.V.A. transformer was also overhauled and put back in service satisfactorily.

All civil and hydraulic works were maintained satisfactorily. Camp buildings water-supply, public health and sanitation were maintained in good order.

80. *Load development.*—The growth of load in the system during the year was very rapid. H.T. supply was given to the following factories :—

(1) Messrs. Harvey Mills at Ambasamudram.

(2) Messrs. Harvey Mills Ginning Factory at Virudhunagar.

(3) Messrs. Paramasiva Nadar Oil Mills at Virudhunagar.

(4) Messrs. India Cements, Limited, Talayuthu (temporary supply) for construction requirements.

(5) Messrs. Karthikeyan Mills, Talayuthu.

The table below shows the growth of load and *revenue since* the commencement of operation :—

Year.	Peak load. K.W.	Units generated in millions. K.W.H.	Gross revenue. RS. (IN LAKHS.)
1944–45	8,700	21·265 *plus* 21·979 *	13·05
1945–46	9,800	47·212 *plus* 7·781 *	17·00
1946–47	14,000	56·62 *plus* 5·491 *	19·50
1947–48	15,000	64 62 *plus* 2·62 *	23 40
1948–49	18,000	71·768 *plus* 17·045 *	29·15

* Represents units purchased from Pykara.

81. *Financial results.*

	RS.		RS.
Capital outlay including arrears of interest	2,48,18,136	Depreciation fund ..	1,01,602
Gross revenue	9,14,585	Special reserve fund ..	40,641
Operation and maintenance excluding suspense ..	10,21,666	Total expenses items 3 to 5.	11,63,909
		Net revenue	17,50,676

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82. *Connected load.*—The connected load in the system under different categories was as follows :—

Serial number and description of load	Number of consumers.	Connected load in K.W.
1. Industrial and high voltage—		
(a) Textiles	10	5,185
(b) Cements	1	48
(c) Oil mills	7	471
(d) Supplies in bulk to distributing licensees—		
(i) Municipal	3	10,365
(ii) Other than municipalities	7	34,186
2. Industrial low voltage—		
(a) Rice mill g	243	1,097
(b) Flour milling and grinding		17
(c) Oil pressing		200
(d) Small workshop		226
(e) Other industries		615
3. Agriculture	428	1,456
4. Domestic (lights and fans)	6,314	3,850
5. Domestic (heat and power)	151	135
6. Public water works and sewage	1	60
7. Street lighting	44	280
8. Miscellaneous	..	..
Total	7,209	58,181

The total connected load at the end of the year was 58,181 K.W. against 38.611 in the previous year, registering 50 per cent increase.

83. *Transmission lines.*—The statement below gives the total length of the transmission and distribution lines in the system :—

Voltage	Constructed during 1948–49.		Total to end of 1948–49.	
	Single circuit lines in miles.	Double circuit lines in miles.	Single circuit lines in miles.	Double circuit lines in miles.
66 K.V. lines	..	..	48·1	125·4
33 K.V. lines	..	..	28·0	..
22 K.V. lines	..	..	40·3	
11 K.V. lines	40·6	..	190·4	9·9
L.T. lines	98·0	..	238·6	..
	138·6	..	545·4	135·3

84. *Power transformer stations.*—The following are the details of the 66, 33, 22 K.V. power transformer stations in the system :—

Sub-stations.	Transformers.	Total capacity. K.V.A.
1 Tuticorin sub-station	2 Nos. 1,250 K.V.A.*	2,500
2 Kayattar sub-station	1 Nos. 750 K.V.A.	750
3 Koilpatti sub-station	2 Nos. 1,000 K.V.A. + 1 No. 1,000 K.V.A.	3,000
4 Sattur sub-station	2 Nos. 250 K.V.A.	500
5 Virudunagar sub-station	2 Nos. 1,000 K.V.A. + 1 No. 1,250 K.V.A. + 1 No. 1,000 K.V.A.	4,250
6 G.N. Patti sub-station	2 Nos. 250 K.V.A. + 1 No. 100 K.V.A.	600
7 Rajapalayam sub-station	2 Nos. 500 K.V.A. + 1 No. 500 K.V.A.†	1,500
8 Mathurai sub-station	3 Nos. 3,000 K.V.A. + 1 No. 3,000 K.V.A.†	12,000
9 Sivaganga sub-station	2 Nos. 250 K.V.A. + 1 No. 250 K.V.A.†	750
	Total	25,850

* One No. 1,250 K.V.A. transformer was recently transferred to Villupuram.
† Spare transformers.

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85. *Distributions.*—Thirty-two numbers distribution transformers with an aggregate capacity of 1,222.5 K.V.A. were erected during the year. The total number of distribution transformers was 126 with aggregate capacity of 6,317·5 K.V.A.

86. *Industrial extensions.*—Temporary high-tension supply to India Cements and to Karthikeyan Mills was given in the year. Supply to Messrs. Harvey Mills, Limited, Ambasamudram, was given for conversion of their water mill to electric drive. Supply to Madura Mills for their ginning factory and press at Virudhunagar and to Messrs. Paramasiva Nadar Oil Mill was also given.

87. *Commercial activity.*—Load development in the system during the year was more rapid than anticipated. Power plant deficiency and shortage of line materials are the main causes retarding further progress.

88. *Agricultural services.*—One hundred and nineteen agricultural services were given during the year against 90 in the previous year. The total number of agricultural services at the end of the year under review was 428 against 309 in the last year.

89. *Rural industries.*—Thirty new villages and 42 rural industrial services were connected up during the year.

90. *Conversion fund.*—No pumpset on hire purchase system has so far been given. About 50 applications have been received and they are under scrutiny.

91. *Firka development.*—The following sanctioned firka schemes were taken up and owing to paucity of materials quick progress could not be made :—

(1) Thirumangalam firka in Mathurai district.

(2) Shermadevi firka in the Tirunelveli district.

Fourteen extensions under firka development have so far been sanctioned in respect of Shermadevi and Thirumangalam firkas. Of these, ten schemes costing Rs. 2·26 lakhs with a connected load of 43 horse-power industrial, 197 horse-power agricultural and 226 K.W. lighting were completed.

Three proposals costing Rs. 0·957 lakh with a connected load of 308 horse-power agricultural and 21 K.W. lighting are awaiting execution and for one proposal the revised sanction of Government was awaited.

Three proposals costing Rs. 3·196 lakhs have been submitted to Government for sanction.

All the above schemes are programmed to be taken up in 1949–50 and completed subject to availability of line materials.

Extension of supply by the department to Malli firka in the West Ramnad licensee's area, was taken up for investigation.

92. *Meter and relay tests and special maintenance.*—In addition to overhauling and reconditioning distribution and power transformers, 3,200 single and polyphase meters were tested and repaired. Tests at site were also conducted for all the Oil Circuit Breakers, metering cubicles, etc. About 1,500 gallons of transformer oil were reconditioned.

93. *Interruptions.*—There were no serious interruptions to supply during the year.

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94. *Audit, Accounts, Stores and Central Office.*—The accounts of the system were audited by the staff of the Accountant-General and certified to be satisfactorily maintained.

All the four stores of the system continued to be very busy. The reserve limit of stock was raised from Rs. 11 lakhs to Rs. 15 lakhs. Verification of stores was completed by the chief storekeeper and stock verifier and the result of the working of the stores was generally satisfactory.

The work in the Central Office increased considerably and proposals for additional staff to cope up with the increase in work were submitted.

95. *Programme for* 1949–50.—Thirty-one major works including four in the firka area are proposed to be completed during the next year. A number of rural extensions will be taken up for investigation during the next year.

Madras System.

96. *General.*—The undertaking completed the first year of operation on 29th August 1948 as a Government-owned system. The work of valuation of the undertaking by the common valuers Messrs. Merz and McLellan was in progress.

Two transportable power sets of 2,500 K.W. capacity each were commissioned during the year to meet the immediate increases in power demand, pending commissioning of the 15,000 K.W. additional plant already ordered. The Villivakkam emergency station was working satisfactorily.

The coal position was causing anxiety during June-July 1948 on account of the disturbed conditions in Hyderabad, and was tided over by building up large stocks of coal from elsewhere.

As the walls of the forced draught cooling tower No. 1 had all crumbled, they were reconstructed with cement mortar and the tower is expected to be put into operation shortly. The walls of No. 2 tower have also since crumbled and temporary arrangements to support them are being made.

Changeover of supply to consumers from D.C. to A.C. on a voluntary basis was being carried out to a small extent.

The peak load of the system rose to 25,400 K.W. as against 21,900 K.W. in 1947-48. The total number of units generated during the year was 102·074 million units compared to 54·95 million units for seven months in 1947-48. Operation of the system was satisfactory. About 3,300 new services were connected up during the year under review. The gross revenue was Rs. 80.04 lakhs as against Rs. 40.75 lakhs for the seven months of 1947–48 since taking over from the company.

97. *Load development.*—The table below gives the installed capacity of the station and its load details in 1947–48 and 1948–49 :—

	Boiler capacity.		Generating capacity.		Peak load in K.W.		Generation in millions of units.	
	1947–48.	1948–49.	1947–48.	1948–49.	1947–48.	1948–49.	1947–48.	1948–49.
	LB./HR.	LB./HR.	K.W.	K.W.				
1. 'A' Station ..	320,000	320,000	41,500	41,500	20,400	19,500	54·03 *	92·64
2. Villivakkam Emergency Station	40,000	40,000	1,500	1,500	1,500	1,500	0·92	1·264
3. 'C' Station Transportable Sets	..	66,000	..	5,000	..	4,400	..	8·17
Total ..	360,000	426,000	43,000	48,000	21,900	25,400	54·95 *	102·074

* For seven months in 1947–48 from date of taking over from Madras Electric Supply Corporation.

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98. *Financial results.*—Since the valuation of the assets of the undertaking taken over from the Madras Electric Supply Corporation is still being carried out by Messrs. Merz and McLellan, the common valuers, a complete financial statement could not be worked out. The revenue position was as follows :—

	Rs. in lakhs.
Gross revenue	80·04
Operation and maintenance expenses including Depreciation and Special Reserve Funds ..	69·98
Net Revenue ..	10·06

99. *Connected load and number of consumers.*—The number of consumers served by this system was 25,445 as against 22,411 last year and they are classified as under :—

H.T. Industrial	34 *
Domestic lighting	17,364 *
Domestic heating and power	1,527 *
Commercial lighting	4,517 *
Commercial heating and power	959 *
Street lighting	6 *
Industrial L.T.	560 *
Agricultural power	2 *
Government departments	414 *
Supply to military departments	62 *
Total ..	25,445

* Connected load under different categories is not given as the information in not available from the records handed over by the Madras Electric Supply Corporation.

100. *Power-house.*—The total installed capacity of the Generating Station including the two transportable power sets and the Villivakkam Emergency Station is 48,000 against 43,000 last year. The total boiler capacity of all the stations is 426,000 lb. hour against 360,000 lb. hour last year. Routine maintenance in all the power stations was carried out satisfactorily.

Consumption of fuel for 1948–49 was 89,863 tons of coal and 4,561 tons of furnace oil compared to 51,030 tons of coal during seven months of 1947–48 The ' C ' Station comprising the two transportable power sets is run on furnace oil while coal is being used for the ' A ' Station and the emergency station.

The coal position gave cause for anxiety during the year on account of the disturbed conditions in Hyderabad as major part of the requirements was being met from the Singareni Collieries. But sufficient stocks were built up by getting coal from elsewhere.

The annual overhaul of boilers in ' A ' Station was carried out. One of the four boilers in the Villivakkam Station was out of commission for repairs and the spares required for this were awaited from Madras and Southern Mahratta Railway. The armature of the exciter of the only 1,500 K.W. turbo-alternator set in the Villivakkam Station failed in June 1948. A diesel engine generator set was obtained from the Public Works Department Workshops and the station run satisfactorily until the damaged armature was

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repaired and the set put back into normal condition. The following major works were in progress or completed at the Power Station :—

(1) The No. 5 set (6,000 K.W.) at 'A' Station was taken out for major overhaul on 4th October 1948 and the work was in progress at the end of the year. The set has been since recommissioned after the overhaul during May 1949.

(2) Construction of new filter beds and erection of new pump house have been completed.

(3) The right flank of the cooling pond was provided with revetment.

(4) The forced draught cooling tower No. 1, the R.C.C. Walls of which had crumbled down was reconditioned.

(5) The erection of the fourth 130 B.H.P. circulating water pump was nearing completion.

(6) The 1,000 K.V.A. transformer at the cooling tower pump house was overhauled.

101. *Transmission lines, sub-stations and distributions.*—Routine maintenance of transmission lines and distribution lines was carried out. Details of the lines are given below :—

Particulars of lines.	Construction during 1948-49.	Total at the end of 1948-49.
	MILES.	MILES.
33 K.V. lines—		
Overhead	17·0	30·7 *
Underground	..	2·0
5 K.V. lines—		
Overhead	..	9.9
Underground	..	112·0
11 K.V. lines—		
Overhead	4·1	4·1
Underground	..	..
L.T. lines—		
Overhead	30 8	146·0
Underground	4·0	171 9

*Includes 17 miles of 33 K.V. line from Kodambakkam to Puduchattram constructed by the Mettur System and handed over to this system.

The 33 K.V. sub-stations, the rotary convertor and rectifier stations and all the distribution transformers as per statement below were all maintained satisfactorily :—

Particulars of sub-stations.	As the end of 1947-48.		As the end of 1948-49.	
	Number in service.	Capacity in K.V.A./K.W.	Number in service.	Capacity in K.V.A./K.W.
33 K.V. sub-stations (including the step up station at Kilpauk).	7	3,650 K.V.A	7	4 100 K.W.
Rotary convertor stations	6	13,500 K.W.	6	13,500 K.W.
Rectifier sub-stations	4	2,750 K.W.	4	2,750 K.W.
Distribution transformer stations (including static stations and 33 K.V./400 V. stations).	58	5,668 K.V.A.	81	6,930 K.W.

One 250 K.W. rotary convertor set was dismantled from Egmore Sub-station and erected at Mylapore to meet the increase in demand in that area. Thirteen numbers pole mounted transformer stations with an aggregate capacity of 1,025 K.V.A. were erected during the year. The building for new Westcott Road Rectifier Sub-station is completed. Orders have been placed for 5 numbers 250 K.W. Rectifier units.

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102. *Extensions.*—The number of extensions sanctioned during 1948–49 was as follows :—

	Number.	Cost. Rs. in lakhs.
Estimates sanctioned by the Superintending Engineer	93	1·93
Estimates sanctioned by the Chief Operation Engineer and Chief Engineer for Electricity	25	5·58

The more important of these were—

(1) Extension of supply to rural loads in Poonamallee.
(2) Extension to the New Madras Club.
(3) Extension of supply to Messrs. Addisons, etc.
(4) Extension to Addison Paint Factory, Sembiem.

In addition to the above, several improvement works of aggregate cost of Rs. 1·44 lakhs were sanctioned during the year and are in progress.

103. *Commercial activity.*—There was heavy demand for power for domestic purposes. The accelerated speed of giving new service connexions introduced last year was kept up. Materials position for overhead service connexions had improved but that in respect of underground service was still unsatisfactory and as such progress of new service connexions was mostly confined to overhead services. The number of services effected during the year was as below :—

Domestic	3,112
Industrial	128
Agricultural	23
Total ..	3,263

An additional load of 606 K.V.A. was permitted to the South Indian Railway, for their traction load from June 1948. This was made possible after the commissioning of the 2,500 K.W. transportable sets.

The 2-2,500 K.W. sets were giving an output of only 4,000 K.W. due to want of certain transformers ordered. These have since been received and are under erection. With the large number of applications on hand the additional 1,000 K.W. that will be available shortly after the transformers are commissioned will be used up very quickly. The 15,000 K.W. turbo set under " B " Station extension is not expected to be ready for operation before the middle of 1951 and as such the power position in the Madras area is very tight. New industrial loads are therefore permitted only with time restriction, viz., that they should not work during the peak load hours. Relief from Mettur to the extent possible through the Mettur-Madras Interconnexion line which is nearing completion will enable a portion of the power demand in the city to be met during the Irrigation discharge period in Mettur, viz., June to January. Changeover of the existing system of D.C. supply to A.C. is being carried out gradually on a voluntary basis.

A 33 K.V. line from Kodambakkam to Kadambattur was constructed for limited exchange of power during emergencies between Mettur and Madras System. The water conditions in Mettur having become critical arrangements were made to transfer Kadambattur distribution of the Mettur System to the Madras System during the summer months of 1949.

104. *Firka Development.*—There is no Firka Development area coming under the jurisdiction of this system.

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105. *Agricultural and rural development.*—During the year under review schemes costing Rs. 2·478 lakhs were sanctioned for giving supply to 35 wells in Poonamallee and Sennerikuppam and rural electrification in East Tambaram. Schemes for giving supply to agricultural pump-sets in Nazarathpet, Meppur, Madavilagam, Nanganallur, Thulukkanchery, Kunnathur, Tirunageswaram, Manachery and Venkatapuram villages and rural electrification of West Tambaram are under consideration. Twenty-three pump-sets were connected during the year under review.

106. *Stores audit and accounts.*—Additional sub-stores were opened at Mount Road, Mambalam and Mylapore. The sub-stores at Cuddapah was also attached to this system consequent on the taking over of the undertaking from the licensee. The reserve limit of stock is Rs. 50 lakhs. The stores branch of this system had been attending to the acquisition and distribution to the various systems of large stock of Military surplus materials.

107. *Transportable power station.*—Both the sets were commissioned during the year, one in April 1948 and the other in June 1948. The two sets were running all working days to supplement the main power station during the peak load hours both in the morning and evening. On account of the non-receipt of the 3,000 K.V.A. transformers ordered along with the set they were worked at 5 K.V. instead of the rated 6·6 K.V. with the result that the output was reduced to 4,000 K.W. instead of the rated 5,000 K.W. The transformers have since been received and are under erection. The capital expenditure to end of 1948–49 on this station was Rs. 29·291 lakhs.

108. *Madras Plant Extensions.*—The work of site clearance for the new station was completed. The piling work for the foundation for the station, office block, control room, transformer annexe and cooling tower was completed. A new railway-siding was provided by the M. & S.M. Railway for handling construction materials. The concrete approach road to the Basin Bridge Station was completed. Tenders for the foundation slab of the main station were called for and contract awarded. Machinery is arriving. Three drums of the three boilers and 50 per cent of the materials for the structural work have already arrived at site.

109. *Administration.*—The terms of provisional service for one year of the ex-Madras Electric Supply Corporation staff who were taken over along with the undertaking were extended for six months in the first instance and another six months, i.e., up to 28th August 1949 pending approval of the Government of proposals for their absorption into Government service.

110. *Programme for* 1949–50.—The following works will be in progress in 1949–50 :—

(1) " B " Station extension.

(2) Reconstruction of the forced draught cooling tower No. 2.

(3) Basin Bridge Sub-station Yard Extension.

(4) Erection of two numbers 3,000 K.V.A. transformers and connecting them to " C " station and " A " station.

(5) Erection of a 11 K.V. line from Basin Bridge to Isolation Hospital.

(6) Erection of 11 K.V. line from Richardson and Cruddas to Isolation Hospital.

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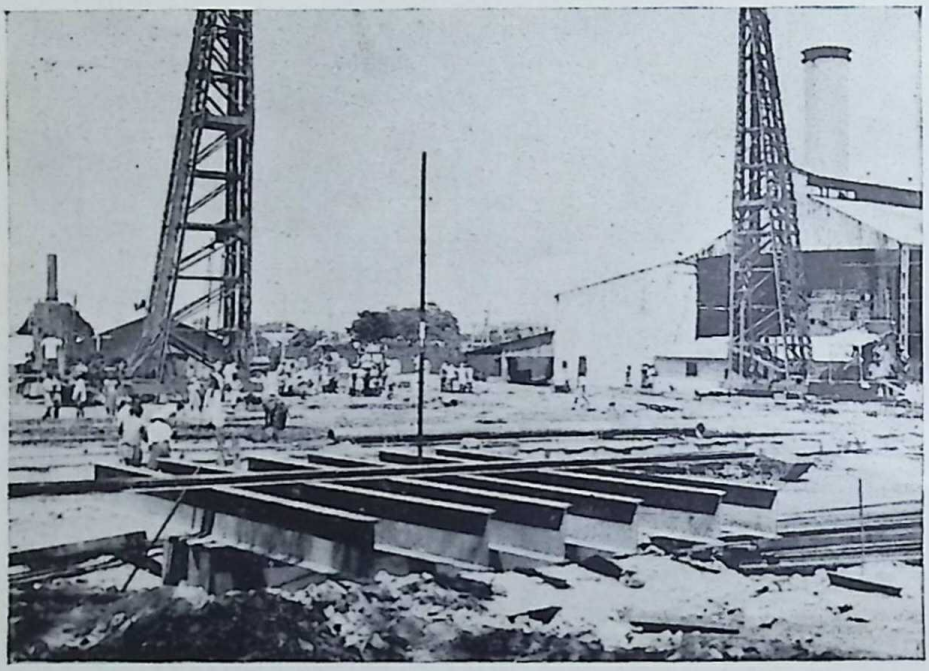

MADRAS 'B' STATION EXTENSIONS—PILING FOUNDATIONS OF MAIN BUILDING.

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(7) Improvement to A.C. supply in various places for which proposals have been sent up and any other locations where it may be considered necessary.

(8) Extension of supply to rural loads in Poonamallee area.

CUDDAPAH ELECTRICAL UNDERTAKING.

111. *General.*—The Cuddapah undertaking was under the management of a private licensee for the last eight years. There was breakdown of supply in the beginning of the year, all the engines of the licensee having failed. For immediate relief, Government rushed four numbers 21·9 K.V.A. diesel sets from Madras and commenced supply to the Municipal Water Works and other essential consumers from 24th March 1948. One 75 K.W. and one 170 K.W. set loaned from the Public Works Department were later commissioned and 24 hours supply was introduced from 2nd October 1948. At the request of the licensee, the undertaking was formally taken over by Government on 18th November 1948 though actual relief to the power station by Government commenced from 24th March 1948.

One more 170 K.W. set was commissioned on 26th February 1949. The present generating plant capacity of the power house comprises :

(1) Four numbers 21·9 K.V.A. Ruston sets.
(2) One number 75 K.W. General Motor diesel set.
(3) Tow numbers 170 K.W. each Petter diesel sets.

The peak load of the station during the year under departmental management was 120 K.W. and the total units generated was 134,702 K.W.H. from 18th November 1948 to 31st March 1949.

The gross revenue realized was Rs. 28,003.

112. *Financial results—*

	RS.
1 Capital outlay	2,51,710
2 Gross revenue	28,003 *
3 Operation and maintenance expenses	38,455 *
4 Net deficit (items 2–3)	10,452

* Figures for the period under Government management, i.e., from 18th November 1948 to 31st March 1949.

113. *Connected load.*—The connected load on the system under the different categories was as follows :—

	K.W.
1 Domestic lights and fans	281
2 Industrial low voltage supply—	
(*a*) Heat and power	5
(*b*) Rice hulling	28
(*c*) Flour milling and grinding	53
(*d*) Small workshops	14
3 Agriculture	103
Total ..	484

114. *Agricultural services.*—There are ten agricultural services totalling 103 K.W.

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Andhra System.

115. *General.*—Progress in the four thermal stations comprising this system, viz., Visakhapatnam, Vijayavada (steam stations), Kakinada and Kurnool (diesel stations) with their connected transmission lines and distributions continued to be satisfactory. The coal position at the Visakhapatnam and Vijayavada stations was not satisfactory owing to labour trouble at the collieries, transport difficulties, and disturbed conditions in Hyderabad. Supply of coal was irregular and inadequate and quality not always suitable. Due to delay in the power plant extensions at Vijayavada and Visakhapatnam, the power position became acute. Proposals for interim supplementation of power by diesel generation were submitted for Vijayavada and those for Visakhapatnam will be submitted shortly.

During the year, 127 agricultural services with a connected load of 385 K.W. and 46 numbers industrial services with connected load of 565 K.W. were connected up bringing the total number of agricultural services at the end of the year to 485 and the connected load to 1,684 K.W.

Extensions costing Rs. 3·9 lakhs were sanctioned during the year.

Visakhapatnam System.

116. *General.*—This was the tenth year of operation. The restricted peak load on the station was 2,800 K.W. and the number of units generated 10·68 millions against 2,500 K.W. and 7·26 millions respectively in the previous year. The power position was rendered acute owing to delay in repairs to turbo-alternator numbers 2 and 3 and erection of 5th boiler. The retention of the 750 K.W. set by erecting the 4th 1,500 K.W. set separately instead of in replacement of the 750 K.W. set was under consideration. The interim supplementation of power by installing temporary diesel station at a suitable centre was also under study. The gross revenue earned during the year was Rs. 8·59 lakhs against Rs. 5·80 lakhs in 1947–48.

117. *Power-house.*—The operation and maintenance of the power-house continued to be satisfactory. The coal position became critical between September 1948 and November 1948 due to change in suppliers, unsuitable size and quality of coal and shortage of wagons. The two 1,500 K.W. sets were thoroughly examined during the year and it was observed that the blades of one of the sets were worn out badly needing replacement. Certain major replacements were also necessary for numbers 1 and 2 boilers which have been in service for the last ten years. These have been ordered.

118. *Load development.*—The table below gives the development of load and revenue since the commencement of operation of the system :—

Year.	Peak load in K.W.	Units generated in millions.	Units sold in millions.	Gross revenue including miscellaneous.
				Rs. in lakhs.
1938–39	820	1·78	Not available.	0·85
1939–40	1,010	2·49	2·09	1·37
1940–41	1,000	3·00	2·43	1·77
1941–42	980	3·09	2·44	1·91
1942–43	840	2·91	2·32	2·09
1943–44	960	3·64	2·97	2·31
1944–45	1,160	4·77	3·86	3·36
1945–46	1,600	6·55	5·78	4·47
1946–47	2,140	7·26	6·52	5·28
1947–48	2,500	7·40	6·32	5·80
1948–49	2,800	10·68	9·19	8·59

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119. *Financial results.*—

	Rs.
Total capital outlay including arrears of interest	42,95,150
Gross revenue	8,58,830
Working expenses excluding depreciation	6,90,314
Net revenue	1,68,516

120. *Connected load.*—The table below shows the connected load at the end of the year under different categories :—

	KW.
I. Industrial high tension supply—	
(*a*) Textiles	..
(*b*) Cement	..
(*c*) Chemicals	..
(*d*) Mining	18
(*e*) Ship building	2,500
(*f*) Oil and other industries	712
(*g*) Sugar	159
(*h*) Tea estates	..
(*i*) Licensees	3,354
II. Industrial low tension supplies—	
(*a*) Rice hulling	320
(*b*) Flour milling	378
(*c*) Oil pressing	186
(*d*) Small workshops	47
(*e*) Others	60
III. Agricultural	75
IV. Domestic heat, power and light	924
V. Commercial heat, power and light	31
VI. Street lighting	20
VII. Miscellaneous (including domestic. military, etc.)	790
Total ..	9,574

121. *Transmission lines, Extra high tension sub-stations and distributions* :—

Voltage.	Constructed during 1948–49.		Total in service.	
	Single circuit. MILES.	Double circuit. MILES.	Single circuit. MILES.	Double circuit. MILES.
33 KV	3	.	51·5	..
11 KV	19·3	..	100·8	10·7

The number of high tension transformer stations was 3 with an aggregate capacity of 2,500 KVA and the number of distribution transformers in service was 32 with a total capacity of 2,085 KVA.

122. *Extensions.*—The following are some of the important extensions completed or almost completed during the year :—

(1) Extension to Visakhapatnam Vanaspathi Oil Products, Seethanagaram.
(2) Extension to Ganapathi Oil Mills, Nellimarla.
(3) ,, Gulivindala Agraharam.
(4) ,, Rain Bow Soap Factory, Vizianagaram.
(5) ,, Industrial Loads at Vizianagaram.
(6) ,, Garbham and Kodur Mining Company.

123. *Agricultural Services.*—One agricultural service with a connected load of 4 KW was connected up during the year bringing the total to 14 and 75 KW.

124. *Rural Industries.*—Eight rural industries with a connected load of 58 KW were connected up during the year.

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VIJAYAVADA SYSTEM.

125. *General.*—This was the tenth year of operation. The peak load of the station was 3,900 KW while giving relief to Kistna Cement Company. The system peak during the year was 3,700 KW. The total number of units generated was 17·30 millions against 14·0 millions during 1947–48. Purchase of power from Messrs. Kistna Cement Company was continued during the year as and when necessary and amounted to 1·34 lakhs of units.

Due to delay in the completion of the power plant extensions the power position was rendered acute. Several important and long-pending industrial and agricultural loads still remained to be connected up. Proposals for setting up a temporary diesel station for interim supplementation of power have recently been submitted to Government.

The gross revenue earned during the year was Rs. 12·82 lakhs against Rs. 7·30 lakhs last year showing an increase of Rs. 5·32 lakhs. The total connected load was 11,259 KW against 7,998 KW last year.

126. *Power house.*—The operation and maintenancce of the power house was satisfactory. Unsuitable type of coal was received from North India during the middle of the year due to stoppage of coal from Singareni collieries on account of the disturbed conditions in Hyderabad. On account of the usage of this type of coal the ash dumping gear of the 33,000 lb./hour boiler sustained damage and the cast iron ash plates and beams melted. The boiler was run for about six months without the gear and in the meantime repairs were done locally. After the successful termination of the police action in Hyderabad, coal supply from Singareni collieries was resumed but the position again deteriorated somewhat towards the end of February 1949 due to labour trouble at the collieries.

The rotor of No. 2—1,500 KW turbo set developed open circuit in the second half of December 1948. Repairs were being carried out departmentally.

No. 3—3,000 KW turbo set was overhauled for the first time. To control the All-India Radio and Kanakamba Paints Works 11 KV feeder a 11 KV control kiosk was erected in the Transformer yard. The special maintenance and meter and relay testing subdivisions were formed in March 1949 and progress of work in both the subdivisions was satisfactory.

A 750 KVA transformer was replaced by a 1,500 KW unit. Two numbers 3,000 KVA transformers were received and their erection will commence shortly.

127. *Load development.*—The development of load and revenue since the commencement of operation of the system is indicated in the table below :—

Year.	Peak load in KW.	Units generated in millions.	Units purchased from Messrs. Kistna Cement Company in lakhs.	Units sold in millions.	Gross revenue (including miscellaneous). RS. LAKHS.
1938–39 ..	530	..	..	..	..
1939–40 ..	1,540	4·68	..	3·92	1·89
1940–41 ..	2,000	6·61	..	5·65	2·84
1941–42 ..	2,300	9·12	..	7·94	3·68
1942–43 ..	2,080	8·99	4·32	7·72	4·11
1943–44 ..	2,420	10·49	3·01	9·07	6·25 *
1944–45 ..	2,400	10·53	0·77	8·99	4·88
1945–46 ..	2,500	10·38	0·63	8·76	5·80
1946–47 ..	3,520	11·23	1·03	10·09	6·53
1947–48 ..	3,900	14·00	1·30	12·05	7·30
1948–49 ..	3,900	17·30	1·34	15·38	12·82

* Larger amount due to miscellaneous revenue from sale of materials.

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128. *Financial results.*—

	Rs.
Total capital outlay including arrears of interest	66,10,753
Gross revenue	12,82,051
Working expenses excluding depreciation	12,82,742
Net revenue	— 691

129. *Connected load.*—The connected load at the end of the year under the different categories was as follows :—

Number and category.	Connected load in KW.
I. Industrial high tension supply—	
(*a*) Textiles	..
(*b*) Cement	890
(*c*) Chemicals	164
(*d*) Gold mining	..
(*e*) Sugar	500
(*f*) Cordite Factory	..
(*g*) Tea estates	..
(*h*) Licensees (Municipalities)	3,955
(*i*) Other than Municipalities	3,137
II. Industrial low tension supplies—	
(*a*) Rice hulling	420
(*b*) Flour milling and grinding	38
(*c*) Small workshops	29
(*d*) Other industries	292
III. Agricultural	1,573
IV. Domestic heat, light and power	242
V. Commercial heat, light and power	8
VI. Street lighting	5
VII. Miscellaneous (including Government departments, military, domestic lighting and power)	6
Total ..	11,259

130. *Transmission lines, sub-stations and distributions.*—Transmission lines and distribution lines constructed during the year and total mileage at the end of the year were as shown below :—

Voltage.	Constructed during the year.		Total at the end of the year.	
	Single circuit.	Double circuit.	Single circuit.	Double circuit.
	MILES.	MILES.	MILES.	MILES.
33 KV	0·1	..	96·4	5·8
11 KV	9·6	..	91·8	..
L.T. lines	15·2	..	91·9	..

The number of high-tension transformer stations was 5.

There was no addition to the transformer capacity during the year which remained at 2500 KVA. This does not take into account the stand-by 250 KVA transformer at Seethanagaram and the 2500 KVA transformer at Kistna Cement Company. Nine numbers distribution transformers were added during the year and the aggregate distribution transformer capacity increased to 2840 KVA. The total number of distribution transformers in service at the end of the year was 64.

131. *Extensions.*—The following are some of the important extensions completed or almost completed during the year under review :—

(1) Extension to Kanakamba Paints and Varnishing Works.
(2) Extension to Kondavapulur village.
(3) Extension to Muthyalampadu village.
(4) Extension to Pedapulipaka village.
(5) Extension to Lift Irrigation Projects at Telaprolu.
(6) Extension to Pothureddipalli village.
(7) Extension to All-India Radio, Vijayavada.
(8) Extension to Lotus Biscuit Factory, Ramavarapadu.
(9) Extension to Steel and Metal Engineering Company, Vijayavada.

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132. *Agricultural services.*—One hundred and twenty-three agricultural services with a connected load of 366 KW were connected up during the year, bringing the total to 405 numbers and 1573 KW.

133. *Rural industries.*—Ten rural industries with a connected load of 180 KW were connected up during the year, bringing the total to 35 and 742 KW.

Kakinada System.

134. *General.*—This was the ninth year of operation. The peak load on the station was 590 KW against 440 KW in the previous year. The number of units generated was 1·89 millions against 1·46 millions last year. The gross revenue earned during the year was Rs. 2·32 lakhs against Rs. 1·42 lakhs last year. Many villages in this area were awaiting supply for development of cottage industries.

The total connected load was 1683 KW against 1379 KW last year.

135. *Power house.*—In order to relieve the power shortage in the area one 170 KW diesel set intended for the Machkund Scheme was diverted and erected pending receipt of two numbers 175 KW sets on order.

These 175 KW sets were received later and one of them was erected and brought into service at the end of the year; the other was under erection and is likely to go into service by April 1949.

136. *Load development.*—The following table shows the development of load and revenue since commencement :—

Year.	Peak load in K.W.	Units generated in millions.	Units sold in millions.	Gross revenue (including miscellaneous revenue in lakhs of rupees).
1940–41	325	0·77	0·75	0·47
1941–42	360	0·94	0·73	0·76
1942–43	341	0·92	0·84	0·81
1943–44	314	0·86	0·77	0·91
1944–45	350	1·06	0·96	1·19
1945–46	420	1·40	1·27	1·62
1946–47	380	1·25	1·14	1·23
1947–48	460	1·46	1·34	1·42
1948–49	590	1·89	1·72	2·32

137. *Financial results*—

	Rs.
1 Capital outlay including arrears of interest	8,98,342
2 Gross revenue	2,32,221
3 Working expenses excluding depreciation	2,34,083
4 Net revenue	— 1,862

138. *Connected load.*—The connected load at the end of the year under different categories was as follows :—

	K.W.
I. Industrial high tension supplies—	
(*a*) Textiles	..
(*b*) Cements	..
(*c*) Chemicals	..
(*d*) Gold mining	..
(*e*) Oil and other industries	..
(*f*) Cordite Factory	..
(*g*) Tea estates	..
(*h*) Licensees	984
II. Industrial low tension supplies—	
Rice hulling	112
Flour milling and grinding	19
Other industries	85

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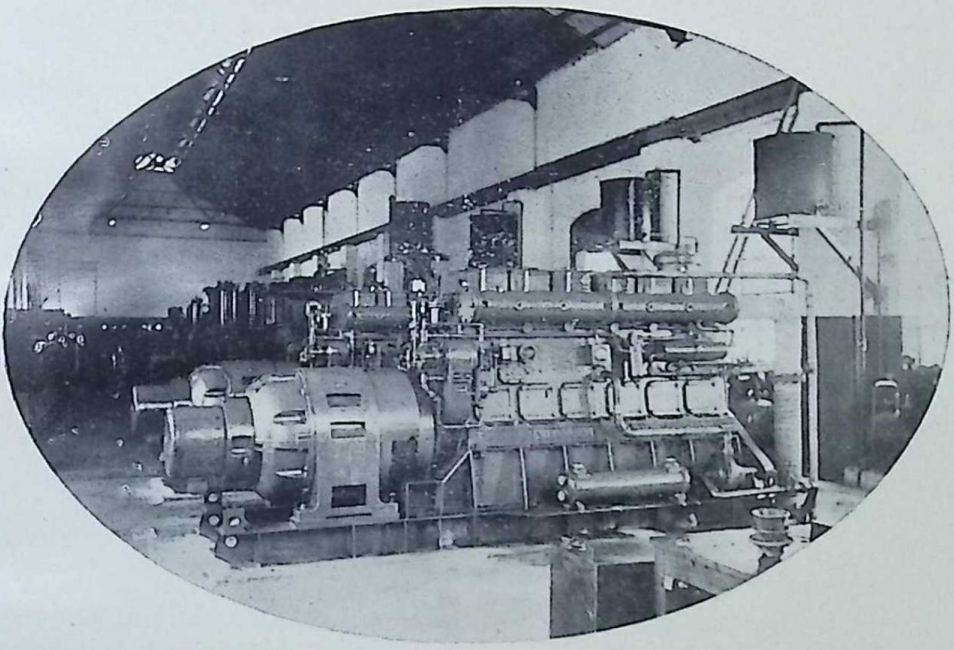

KAKINADA POWER-HOUSE.

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	KW.
III. Irrigation and agricultural	34
IV. Domestic heat and power light	323
V. Commercial heat, power and light	7
VI. Street lighting	41
VII. Miscellaneous	78
Total ..	1,683

139. *Transmission lines, sub-stations and distributions.*—The lengths of transmission lines at the end of the year were as follows:—

Voltage.	Constructed during the year—single circuit.	Total in service.
	MILES	
33 KV	..	..
11 KV	..	55·4
L.T. lines	1·0	30·8

There were no power transformer sub-stations in the area. The number of distribution transformer stations was 16 with a total capacity of 995 KVA; against 440 KVA last year.

140. *Agricultural services.*—Three agricultural services with a connected load of 15 KW were connected up during the year bringing the total number of pump-sets connected up to 6.

141. *Rural industries.*—Eight rural industries with a connected load of 60 KW were connected up during the year.

142. 11 *KV line to Ramapadasagar.*—The line and transformers were idle.

143. *Extensions.*—The progress of construction of various lines in this area is indicated below:—

(1) 33 KV line from Rajahmundry Hydro- sub-station to Dwarapudi—80 per cent. (No further progress for want of insulators.)

(2) 33/11 KV line from Dwarapudi to Tapeswaram—90 per cent.

(3) 11 KV line from Tapeswaram to Mandapeta—90 per cent.

(4) 11 KV line from Rajahmundry Hydro sub-station to Rajahmundry Electric Supply Company—99 per cent.

(5) 11 KV line from Rajahmundry Hydro sub-station to Paper Mills—99 per cent.

Kurnool System.

144. *General.*—This was the second year of operation under Government management. Peak load of the station reached 165 KW against 140 KW in the previous year. The number of units generated was 0·56 millions against 0·326 millions last year. The total connected load was 521 KW and the gross revenue earned was Rs. 1·02 lakhs against 337 KW and Rs. 0·68 lakh respectively last year. Twenty-four hours supply was given on festival days and normally 21 hours supply was maintained daily. Due to want of station capacity, supply was not extended outside municipal limits.

145. *Power house.*—The working of the power house was improved by arranging circulating water from the canal and by the installation of another aid compressor set. Proposals for installing a 275 KW set to augment the generating capacity were under consideration.

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146. *Load development.*—

	1947–48.	1948–49.
Connected load	337 KW.	524 KW.
Peak load	140 ,,	165 ,,
Number of units generated	0·33 millions.	0·56 millions.
Number of units sold	0·28 ,,	0·46 ,,
Gross revenue	0·68 lakhs.	1·02 lakhs.

147. *Financial results.*—

	Rs.
Total capital outlay including arrears of interest	1,60 001
Gross revenue	1,02,475
Working expenses excluding depreciation	95,793
Net revenue	6,682

148. *Connected load.*—The connected load at the end of the year under review, under different categories was as shown below :—

	Rs.
I. Industrial low tension supplies—	
Flour milling and grinding	107
Small Workshops	12
Other Industries	25
II. Irrigation and Agricultural	2
III. Domestic heat, power and lights	333
IV. Commercial heat, power and lights	16
V. Street lighting	15
VI. Public Water Works	14
Total	524

149. *Transmission lines and distributions.*—The table below gives the length of transmission lines of different voltages at the end of the year :—

Voltage.	Construction during the year. MILES	Total at the end of the year. MILES
33 KV	0·04	3·50
L.T. lines	15·0	29·90

The number of distribution transformers in service at the end of the year was 6 with a capacity of 280 KVA.

150. *Rural industries.*—Four rural industries with a connected load of 10 KW were connected up during the year.

151. *Firka development schemes in Andhra System.*—Of the 10 areas selected for firka development within the Andhra System, the Pendurti Firka Scheme was sanctioned by Government and preliminary work has been started. Progress on the schemes is indicated below :—

(1) Pendurti Firka—Scheme sanctioned by Government and work begun.

(2) Kurnool Firka—Government sanction awaited.

(3) Dendulur Firka Scheme—Scheme finalized and sent up to Government.

(4) Vijayavada Firka Scheme—Scheme finalized and will be submitted shortly to Government.

(5) Rajahmundry Firka Scheme—Preliminary investigation being done.

(6) Gara Firka—Postponed to be reinvestigated along with supply to Chicacole.

(7) Madugula and Kota Uratala Firkas—Scheme investigated and reported to be not remunerative.

(8) Polavaram Firka—Investigation in hand.

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152. *Audit Accounts Stores and administration.*—All the stores of the system were verified by the stock verifier during the year and found satisfactory.

Two new subdivisions, viz., West Godavari and Meter and Relay Test were formed during the year with headquarters at Vijayavada. An Assistant Engineer, Technical, was appointed in the Central office and a new subdivision for overhauling transformers in the Visakhapatnam and Vijayavada areas was formed in January 1949.

153. *Programme for* 1949–50.—In addition to normal extension works it is proposed to push through the works on the Dendulur and Penuharthi Firka Schemes. The erection of a 22,000 lb. per hour boiler at Visakhapatnam will also be taken up.

ELECTRICAL INSPECTORATE AND LICENSEE ELECTRIC SUPPLY UNDERTAKINGS.

154. *Electrical undertakings.*—The number of electric supply undertakings under Indian Electricity Act (including the Rameswaram and Sembiam undertakings operating under section 28 of the Indian Electricity Act) was 75 at the close of the year of which 35 were managed by local bodies and the rest by licensees. On account of the merger of the State of Pudukottah with the Province, four private licensees previously operating under the State Act were added to the above number bringing the total to 79. The question of extending the Indian Electricity Act and Rules to the merged State was under correspondence with the Government of India. The Electricity Act and the Madras Cinematograph Act and Rules have however been extended to this state as well as to the State of Banganapalle which had also merged with this Province. The Tiruchendur Undertaking operating under section 28 of the Indian Electricity Act was dissolved in 1947. As the working of the Tirumalai-Tirupati Devasthanams undertakings was not efficient the services of a competent engineer were requisitioned by the licensee and departmental Assistant Engineer was posted for the charge of the undertaking. The conditions of supply in the licensed undertakings were normal except for major interruptions and unsatisfactory supply due to engine trouble in Rajahmundry, Ongole, Prodattur, Bellary, Hospet, etc.

As the present policy of Government is not to grant any new licence or extend its period or area of supply applications from licensees for extension of period and area of supply were rejected. Sanction under section 28 of the Indian Electricity Act was however accorded to Messrs. Kanara Ceramics, Limited, for temporary supply in the area of the Kasaragod Panchayat Board pending permanent Government supply. The following undertakings were taken over by the department after negotiation with the licensee and their consent :—

	Date of taking over.
1 Cuddapah Electric Supply Company	18th November 1948.
2 Kollegal Panchayat Board	1st October 1948.
3 Valparai Township	1st July 1948.

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Notice of purchase on the termination of the period of licence has been served on the following licensees during the year :—

	Date of expiry of licence.
1 Kumbakonam Electric Supply Corporation ..	14th April 1950.
2 Mangalore Electric Supply Company	6th May 1950.
3 Tirunelveli-Tuticorin Electric Supply Company	23rd September 1950.
4 Reliance Electric Supply Corporation	18th November 1950.
5 Salem-Erode Electriccity Distribution Company ..	6th January 1951.

The Ponnani Licensee has not yet commenced work and the works of the East Coast licensee are not yet completed.

As many licensees were unable to effect supply due to dearth of meters, they were permitted to give unmetered supply up to 15th June 1949.

Details of the plant at the Generating Stations of both licensees and Government are given in Appendix ' E '.

155. *Tariffs.*—The financial position of all licensees was being scrutinized with special reference to surplus profits earned and they were addressed to reduce their rates wherever the profits were found to be excessive. Proposal for reduction of rates in Palghat and Devakottai licensee's areas were approved by Government, and proposals for reduction of rates in the areas of the Kozhikode, Vijayavada, Chittoor, Bodinayakkanur, Salem, Erode, Karaikudi, Virudhunagar, Kanadukathan, Dindigul, Pollachi, Kodaikanal and Karur licensees were under consideration.

156. *Indian Electricity Act and Rules.*—Certain provisions of the Electricity Supply Act (1948) came into force on 10th September 1948.

Provisions of rule 49 (5) to (8) of the Indian Electricity Rules were relaxed up to 31st March 1949.

Proposals for the enforcement of rule 48 of the Indian Electricity Act Rules were still under the consideration of Government.

Rule 60 (1) (*d*) of the Indian Electricity Rules which required licensees to provide linked switches were relaxed up to 31st March 1949.

Amendments to Indian Electricity Rules proposed by the Central Government were under consideration of the Central Electricity Board.

157. *Accounts.*—During the year under review the accounts of 65 licensees were scrutinized and special watch exercised over the large profits earned by licensees. They were addressed wherever necessary to reduce their rates.

158. *Restriction and Control Orders in licensee's areas.*—The Restriction and Control orders were continued for a further period of one year beyond 1st October 1948. Supply to the following categories of loads in the Hydro-Electric areas was however excluded from the purview of the above orders :—

(1) Domestic.
(2) Agricultural.
(3) Industrial loads up to 10 horse-power.

Restrictions on temporary supply to cinemas were further relaxed by Government.

Revised instructions were issued by Government in July 1948 regarding essentiality certificates for supply of power in licensee's areas.

159. *Freezing orders.*—The above orders continued to be in force during the year.

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160. *Peak load restrictions.*—The restrictions were continued in the following places :—

(1) Hindupur.
(2) Prodattur.
(3) Mangalore.
(4) Rajahmundry.
(5) Nellore,

161. *Priority schemes for electric supply.*—The schemes to cut off load in a pre-arranged order of priority in cases of breakdown in the power stations were continued at Ongole and Prodattur.

162. *Committee for Madras.*—The committee continued to function dealing with applications for supply in the area served by the Madras Electricity System.

163. *Rationing of electricity.*—The restrictions imposed in the preceding years on the working hours of oil engine generating stations continued to be in force during the year.

Retail rationing of electricity continued to be in force in the areas of the following licensees :—

(1) Undertakings taking supply from the Madras Electricity System.
(2) Five licensees taking supply from the Government thermal station at Vijayavada.
(3) Kakinada Municipality and
(4) Nellore.

The restrictions imposed on the number of shows and also on the exhibition of slides, trailers, etc., in the cinemas in the city of Madras including the area served by the Sembiam undertaking and in the panchayat areas of the Chingleput district receiving supply from the Madras System were removed.

164. *Supply position in the licensees' areas*—(1) *Hydro electric areas.*—In view of the adverse water conditions on account of the failure of the monsoon restrictions had to be imposed on fresh industrial loads and other supplies (especially in the Mettur System).

(2) *Government thermal stations—Vijayavada and Visakhapatnam area.*—On account of irregular supply of coal from Hyderabad and inadequacy of stock the Superintending Engineer was authorized to regulate supply in the area supplied by the Vijayavada station with reference to the stock position of coal. Due to the acute shortage of power in the areas served by the Vijayavada and Visakhapatnam Thermal Stations, only domestic and agricultural loads were permitted.

Kakinada.—The supply position in the area of this licensee has considerably eased with the installation of two additional 175 K.V.A. units.

(3) *Self-generating licensees.*—The supply position in most of the licensees, areas continued to be unsatisfactory due to inadequate plant capacity.

(4) *Nellore.*—In order to enable the Nellore licensee to overhaul the engines—the condition of which had become very bad—the licensee was permitted to curtail supply and stagger loads.

(5) *Rajahmundry*—There was a major interruption to supply consequent on the breakage of the crank shaft of the 350 B.H.P. engine and the licensee was able to give only restricted supply.

(6) *Mangalore.*—One of the two sets ordered by the licensee has been erected and work on the second is in progress.

There were a number of breakdowns in the power houses of the Prodattur, Ongole, Chicacole, Hospet and Bellary licensees.

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165. *Diesel oil control.*—Scarcity of supply of oil was keenly felt during the months of May to October 1948. As soon as the position eased the licensees were instructed to build up necessary reserve stock to meet emergencies.

Only one of the self-generating licensees was having 24 hours supply, two having 22 hours supply, three having 20 hours supply and the rest having less than 20 hours of supply.

The average aggregate monthly oil consumption of different undertakings for 12 months during the y ar was 211·86 tons representing an increase of 18·3 per cent on the consumption prior to introduction of control.

The Cuddapah and Kollegal undertakings using diesel oil were taken over by Government during the year.

166. *Assistance to licensees regarding plant, poles, etc.*—Most of the licensees received their allotments of second-hand rail poles from the large stock ordered by the Chief Engineer.

Control was continued over the supply of G.I. pipes, fittings and iron materials.

167. *Strikes in licensees' areas—Visakhapatnam Electric Supply Corporation.*—A notice of strike from 21st November 1948 was issued by the employees' union on the licensee, but the strike did not materialize as both the parties agreed to abide by the decision of the Chief Electrical Inspector to Government on the points at dispute. Strikes were threatened by the workers of the Nellore, Karaikudi and Prodattur licensees but did not materialize.

168. *Surcharges.*—The total number of licensees who sent their declarations of war costs surcharge during the year was 48. Of this 24 sent 'nil' declarations and of the rest only 13 were permitted to levy war costs surcharge throughout the year and three for a part of the year. The war costs surcharge order was so amended as to enable licensees to levy fuel surcharge with prior approval of Government.

169. *Laboratory.*—Supply pressure and meter tests of 28 licensees were carried out during the year. In most cases the pressure of supply was found to be varying beyond the permissible limits.

The tests carried out in the laboratory of Madras and at site in licensees areas were as follows:—

	Number of tests.
Laboratory—	
Rotating sub-standard meters	167
Commercial meters and other instruments	239
Transformer oil tests	149
Fire extinguishers	1,109
Laboratory sub-standard meters	104
Site test—	
Voltage tests	560
Meter	584
Total ..	2,912

Of the 167 rotating sub-standard meters tested during the year 80 were from licensees and the rest from Government systems.

Total revenue realized as testing fees during the year amounted to Rs. 16,492 including contributions from the systems.

170. *Local authorities electrical undertakings.*—The number of local authorities electric supply undertakings in the Province during the year was 31 against 32 in the previous year. The education was on account of the Kollegal Panchayat Undertaking having been taken over by Government.

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Systematic inspection of the undertakings was carried out by the Inspectorate of the Local Authorities undertakings and improvement in the standard of efficiency and administration was observed.

The Tanjore Municipal Electrical Undertaking was raised to Grade I and the Dharapuram, Periyakulam, Sivakasi and Tiruvannamalai Municipal undertakings were raised from Grade IV to III.

Loan applications for sums amounting to Rs. 1,10,500 were received during the year from various local bodies for the improvement of their electrical undertakings and after scrutiny a total sum of Rs. 75,000 was recommended for sanction.

Technical sanction was accorded to estimates to the extent of Rs. 73,555. Tenders to the value of Rs. 2,72,334 were scrutinized and advice given.

171. *Madras Cinematograph Act and Rules.*—The total number of cinemas at the end of the year under review was 957, of which 360 were permanent and the rest 597 touring. The table below gives the number of cinemas in existence for the past seven years :—

Year.	Permanent.	Touring.	Total.	Year.	Permanent.	Touring.	Total.
1943 ..	239	150	389	1947 ..	270	286	556
1944 ..	234	125	359	1948 ..	308	491	799
1945 ..	236	131	367	1949 ..	360	597	957
1946 ..	250	160	410				

Inspection of all cinemas was carried out during the year. The proprietors of the following cinemas were prosecuted for infringement of the Cinematograph Rules :—

(1) Central Talkies, Salem.

(2) Sri Ramalinga Choodambikai Touring Talkies, Jalakantapuram, Salem district.

172. *Cinema operators licence.*—One examination was held during the year at Madras, at which 277 candidates appeared. One hundred and sixty-five candidates were successful. Since the inception of the examination 1,962 candidates have come out successful. One hundred and ninety-three licences were issued during the year bringing the total number of licences issued up to end of 14th March 1949 to 1,713.

173. *Administration of the Madras Electricity Duty Act.*—This is the tenth year of working of the Duty Act and Rules. The actual revenue realized from this source since the inception of the Act is furnished below :—

Year.	Amount. IN LAKHS. RS.	Year.	Amount. IN LAKHS. RS.
1939–40	5·07	1944–45	7·13
1940–41	6·54	1945–46	8·04
1941–42	6·58	1946–47	9·83
1942–43	5·64	1947–48	10·66
1943–44	5·82	1948–49	11·16

The Tiruchirappalli-Srirangam and the Mathurai Electrical undertakings continued to top the list of duty paying licensees.

The number of licensees paying duty during the year was 68 against 62 during 1947–48. As the Cuddapah undertaking was taken over by Government it ceased to pay duty. The following licensees commenced paying duty during the year :—

(1) Adoni.
(2) Alandur.
(3) Anantapur.
(4) Narasaraopet.
(5) Pudukottah State.

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The books of accounts of 27 electrical undertakings were inspected during the year under the Madras Electricity Duty Act and Rules.

174. *Expenditure and revenue.*—The total revenue realized by the Inspectorate under the different heads of account for 1948–49 is as given below:—

Revenue.	Rs.
1 From inspections under the Indian Electricity Act, Cinematograph Act and miscellaneous rules	1,20,674
2 From Madras Electricity Duty Act	11,16,292
3 From use of Government water for generation of power	20,213
4 From penalty for excess consumption	1,11,701
Total ..	13,68,880

The total expenditure during the year as on 16th March 1949 is Rupees 1,75,200.

175. *Accidents*—Return of electrical accidents in Madras Province during 1948–49.

—	Departmental employees.			Non-departmental employees.			Consumer's equipment.		
	Unauthorized working.	Non-compliance of safety rules.	Other causes.	Snapped conductor.	Inquisitive climbing.	Other causes.	Careless handling.	Faulty equipment of wiring.	Total.
Government Systems—Fatal—									
(i) Papanasam System ..	..	..	..	..	6	..	1	..	7
(ii) Pykara System	..	..	3	..	9	3	..	..	15
(iii) Andhra Power System ..	..	..	..	..	1	2	2	..	5
(iv) Mettur System	..	4	..	..	6	1	..	..	11
(v) Madras Electricity System.	..	..	..	1	..	..	..	..	1
Non-fatal—									
(i) Papanasam System ..	..	..	7	..	6	..	3	..	16
(ii) Pykara System	..	..	19	..	9	1	..	..	29
(iii) Andhra Power System ..	..	..	2	..	6	1	1	..	10
(iv) Mettur System	..	3	..	..	22	1	1	..	27
(v) Madras Electricity System.	..	..	3	2	..	1	..	..	6
Company Licensees—									
(*a*) Non-fatal	..	7	14	3	1	10	1	..	36
(*b*) Fatal	..	2	4	2	..	7	..	..	15
Local Authorities undertakings—									
(*a*) Non-fatal	..	2	2	1	..	2	..	..	7
(*b*) Fatal	..	..	..	1	..	3	..	..	4
Non-licensees—									
(*a*) Non-fatal	..	..	1	..	1	..	..	..	2
(*b*) Fatal	..	..	..	..	..	..	..	..	..
								Total	191

176. *Staff.*—Sri G. Sundaram, Chief Engineer for Electricity, was on leave for three months from 10th September 1948 and during this period Sri S. R. Krishnamurthy, Chief Construction Engineer, acted as Chief Engineer for Electricity. On return of Sri G. Sundaram from leave, Sri S. R. Krishnamurthy proceeded on leave for four months from 10th December 1948.

Sri J. Kuriyan, Chief Operation Engineer, was on leave for one month and three weeks from 20th May 1948. He was again on leave for six weeks from 28th September 1948 and on the expiry of this, he proceeded to Bihar to take up appointment as Chief Electrical Engineer of that Government.

Sri B. R. Somayajulu acted as Chief Operation Engineer in the leave vacancy of Sri J. Kuriyan. On sanction of the second Chief Operation Engineer's post, Sri B. R. Somayajulu was appointed as Chief Operation

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Engineer (North). When Sri J. Kuriyan went to Bihar, Sri N. R. Narasimhamurthy was promoted as Chief Operation Engineer (South) and he assumed charge on 3rd November 1948.

Sri L. Ekambaram, Divisional Electrical Engineer, was promoted as Superintending Engineer and initially posted as Superintending Engineer, Andhra Power System, in the short leave vacancy of Sri V. K. Govinda Menon and later posted as Superintending Engineer, General Construction Circle. Sri V. P. Appadurai, Divisional Electrical Engineer, was promoted as Superintending Engineer and posted as Superintending Engineer (Technical), *vice* Sri P. V. A. Narayanamurthy transferred to Mettur. Sri V. Pappu was promoted as Superintending Engineer and posted as Superintending Engineer, Andhra Power System, *vice* Sri K. M. Kurivilla who proceeded on leave.

Sri P. M. Chengappa was promoted as Chief Construction Engineer in the vacancy caused by the deputation abroad of Sri S. R. Krishnamurthy and he assumed charge on 20th May 1948. He was again Chief Construction Engineer, during Sri S. R. Krishnamurthy's appointment as Chief Engineer (Electricity) and his subsequent leave from 10th December 1948.

Mr. R. G. Mc. Morren, Assistant Generation Superintendent, Madras System, proceeded on leave for three months from 1st March 1949. Sri P. K. Gnanasagaram, Chief Accounts Officer, Madras System, proceeded on leave from November 1948 and Sri K. Kesava Ayyangar, Assistant Accounts Officer of Accountant-General's office, was appointed in his place.

The following promotions were made during the year under review :—

	Number and name of officer.	Post to which promoted.
1	Sri T. R. Ramachandran..	Divisional Electrical Engineer.
2	„ V. Venugopalan (on other duty with the Government of India).	Do.
3	„ G. S. Ramaswami	Do.
4	„ L. M. Sundaram	Do.
5	„ N. B. Vasudevan	Do.
6	„ P. Rajagopal Pillai	Do.
7	„ R. Ramachandra Pillai (on deputation in United Kingdom).	Do.
8	Dr. A. G. Kantayya	Do.
9	Sri K. T. Kuriyan	Do.
10	„ E. V. Seshan	Executive Engineer, Civil.
11	„ G. Garudachar	Do.
12	„ R. Sankaran	Do.

Mr. A. C. D. Rozario, Electrical Engineer (General), retired from Government service on 21st February 1949. Sri V. Krishna Ayyangar, Assistant Engineer (Class V) proceeded on leave from 21st April 1948 preparatory to retirement on 16th September 1948.

177. *Acknowledgment.*—The thanks of the department are due to the Director-General, India Store Department, London, the Central Electricity Commission, Simla, the India Purchase Mission in Washington and other control authorities for their valued help during the year.

Thanks are also due to the electricity consumers whose co-operation was of importance in the successful working of the department during the year.

Warm appreciation of the hard and willing work put in by the whole staff of the department notwithstanding difficult living conditions is hereby recorded.

G. SUNDARAM,
Chief Engineer for Electricity.

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APPENDICES.

APPENDIX A.

List of construction works undertaken with expenditure to end of 1948–49.

Name of schemes.	Expenditure during 1948–49 up to end of March. RS.	Total expenditure to end of 1948–49. RS.
I. Government schemes—		
1. Hydro-Electric Schemes—		
(1) Pykara Hydro-Electric Scheme	23,47,900	3,88,73,948
(2) Mettur Hydro-Electric Scheme	15,80,559	2,66,76,899
(3) Papanasam Hydro-Electric Scheme	8,28,598	2,28,08,875
(4) Kollegal Scheme	60,034	85,559
(5) Hindupur Distribution Scheme	29,828	29,828
2. Thermal Electric Schemes—		
(1) Visakhapatnam Electric Scheme	1,16,136	29,13,280
(2) Vijayavada Thermal Scheme	3,59,471	63,22,723
(3) Kakinada Thermal Scheme	2,62,743	8,73,431
(4) West Godavari District Electrification Scheme	5,087	1,98,405
(5) Kurnool Scheme	37,488	1,57,161
(6) Madras Thermal Scheme	(—) 12,78,704	1,20,63,380
(7) Cuddapah Thermal Scheme	2,51,710	2,51,710
3. Hydro-Electric Schemes—Post-war Reconstruction—		
(1) Moyar Scheme	55,61,747	1,17,13,881
(2) Pykara III Stage Extensions	12,94,050	23,58,596
(3) Madras-Mettur Interconnection	15,34,589	43,41,896
(4) Extension to Kuppam	1,93,842	4,58,977
(5) Extension of supply from Erode to Tiruchirapalli and Dalmiapuram	66,815	76,765
(6) 66/110, K. V. Extension from Erode to Salem	33,663	38,485
(7) Mettur Workshop Expansion Scheme	2,212	2,212
(8) Chingleput-Kanchipuram-Arkonam Extensions	20,443	53,866
(9) Tanjore-Mayuram-Chidambaram Extensions	25,134	25,156
(10) Papanasam Plant Extensions	12,80,984	35,94,824
(11) Mathurai Thermal Scheme	23,36,895	28,12,429
(12) 66 K. V. Line from Mathurai to Tirumangalam, Rajapalayam and Tenkasi	52,613	59,564
(13) Machkund Scheme	17,68,744	37,35,055
(14) Ceded Districts Scheme	9,99,674	20,80,196
4. Thermal Electric Schemes—Post-war Reconstruction—		
(1) Visakhapatnam Power House Extensions	2,27,716	11,32,677
(2) Madras Power House Extensions	32,79,734	64,48,182
(3) Rajahmundry-Samalkot Extensions	31,56,593	62,57,002
(4) Nellore Thermal Scheme	39,656	52,864
Total	2,64,75,954	15,69,97,826

APPENDIX B.

Budget provision for Capital Works in 1949–50.

Serial number and Capital Expenditure.	Budget, 1949–50. RS.
81. A. CAPITAL OUTLAY ON ELECTRICITY SCHEMES.	
1. Hydro-Electric Schemes (Excluding Post-war Reconstruction)—	
A. Pykara Hydro-Electric Scheme—	
(1) Pykara Hydro-Electric Scheme	7,35,800
(2) Distribution of power in the Pykara System	9,55,900
(3) Supply of power to the West Coast	51,900
(4) 66, K. V. Extension to and construction of substation at Pollachi	10,17,000
(5) Construction of transmission lines and other works for the supply of power to intending consumers	10,00,000
(6) Pension charges	21,500
Total, 81. A. 1. A. Pykara Hydro-Electric Scheme	37,82,100

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APPENDIX B—*cont.*

Budget provision for Capital Works in 1949–50—cont.

Serial number and Capital Expenditure.	Budget, 1949–50. RS.
B. Mettur Hydro-Electric Scheme—	
(1) Mettur Main Scheme	33,500
(2) Erode-Tiruchirappalli Extensions	6,700
(3) Tiruchirappalli-Negapatam Extensions	3,900
(4) Extension of supply to Ranipet-Kaveripakkam and Kanchipuram.	3,300
(5) Supply of power of Arkonam	21,200
(6) Distribution of power in Mettur System	14,00,300
(7) Supply of Electric power to Pakala and Chandragiri	100
(8) Construction of transmission lines and other works for supply of power to intending consumers	27,50,000
(9) Minor works—Construction of quarters for the line and operation staff	31,900
(10) Construction of additional quarters at Mettur Dam	4,51,300
(11) Pension charges	18,000
Total, 81. A. 1. B. Mettur Hydro-Electric Scheme	47,20,200
C. Papanasam Hydro-Electric Scheme—	
(1) Papanasam Hydro-Thermal Project	1,61,100
(2) Distribution of power in the Papanasam System	6,49,700
(3) Supply of power to Mathurai	7,700
(4) Construction of Mathurai-Kovilpatti Second circuit transmission line	17,500
(5) Construction of quarters at Kayattar and other places	84,800
(6) 66, K. V. Extension from Papanasam to Tirunelveli and Kayattar	6,10,000
(7) Supply to agricultural and Industrial purposes at Cinnamaniachi and eight other villages	2,01,500
(8) Supply to Sholavandan	56,000
(9) Supply to agricultural purposes at Sankarinagar	1,12,000
(10) Pension charges	10,800
Total—81. A. 1. C. Papanasam Hydro-Electric Scheme	19,10,900
D. Kollegal Hydro-Electric Scheme—	
(1) Kollegal Hydro-Electric Scheme	49,100
(2) Pension charges	..
Total, 81. A. 1. D. Kollegal Hydro-Electric Scheme	49,100
E. Hindupur Distribution Scheme—	
(1) Hindupur Distribution Scheme	1,39,200
(2) Pension charges	300
Total, 81. A. 1. E. Hindupur Distribution Scheme	1,39,500
1. Hydro-Electric Schemes (Post-war Reconstruction)—	
A. Pykara Hydro-Electric Scheme—	
(1) Moyar Hydro Electric Scheme	1,42,02,500
(2) Pykara Plant Extensions III and Final Stage	75,47,000
Total, 81. A. 1. (Post-war Reconstruction) A. Pykara Hydro-Electric Scheme	2,17,49,500
B. Mettur Hydro-Electric Scheme—	
(1) Madras-Mettur Interconnection Scheme	12,74,700
(2) Extensions to Kuppam	3,93,300
(3) Extension of supply from Erode to Tiruchirappalli and Dalmiapuram.	13,80,600
(4) 66/110, K. V. Extension from Erode to Salem	7,92,800
(5) Mettur Workshop Expansion Scheme	10,12,500
(6) Chingleput-Kancheepuram-Arkonam Extension Scheme	3,82,100
(7) Tanjore-Mayuram-Chidambaram Extension Scheme	5,85,400
Total, 81. A. 1. (Post-war Reconstruction) B. Mettur Hydro-Electric Scheme	53,22,200

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APPENDIX B—*cont.*

Budget provision for Capital Works in 1948–49—cont.

Serial number and Capital Expenditure.	Budget, 1948–49.
	RS.
C. Papanasam Hydro-Electric Scheme—	
(1) Papanasam Plant Extensions II Stage	3,71,100
(2) Madura Thermal Scheme	12,73,300
(3) 66, K.V. Line from Mathurai to Tirumangalam-Rajapalayam and Tenkasi	4,54,700
Total, 81. A. 1. (Post-war Reconstruction) C. Papanasam Hydro-Electric Scheme ..	20,99,100
D. Machkund Hydro-Electric Scheme	59,73,000
E. Ceded Districts Scheme	20,55,800
II. Thermo Electric Schemes (Excluding Post-war Reconstruction)—	
A. Visakhapatnam Thermal Scheme—	
(1) Visakhapatnam Thermal Scheme	10,400
(2) Distribution of power in the Visakhapatnam Thermal area	5,25,000
(3) Pension charges	5,200
Total, 81. A. II. A. Visakhapatam Thermal Scheme ..	5,40,600
B. Vijayavada Thermal Scheme—	
(1) Vijayavada Thermal Station	77,400
(2) Distribution of power in Vijayavada area	4,55,200
(3) Third Generating unit at Vijayavada	1,000
(4) Gudivada-Pamarru-Vuyyur Extensions	86,300
(5) Pension charges	6,800
Total, 81. A. II. B. Vijayavada Thermal Scheme ..	6,26,700
C. Kakinada Thermal Scheme—	
(1) Kakinada Thermal Station	7,16,800
(2) Distribution of power in the Kakinada area	1,34,400
(3) Pension charges	5,500
Total, 81. A. II. C. Kakinada Thermal Scheme ..	8,56,700
D. West Godavari District Electrification Scheme—	
(1) West Godavari District Electrification Scheme	8,47,700
(2) Pension charges	3,500
Total, 81 A. II. D. West Godavari District Electrification Scheme ..	8,51,200
E. Kurnool Thermal Scheme—	
(1) Kurnool Thermal Station	1,26,800
(2) Distribution of power in Kurnool Thermal area	22,400
(3) Pension charges	900
Total, 81. A. II. E. Kurnool Thermal Scheme ..	1,50,100
F. Madras Thermal Scheme—	
(1) Madras Thermal Station	9,000
(2) Pension charges	..
Total, 81. A. II. F. Madras Thermal Scheme ..	9,000
G. Cuddapah Thermal Scheme—	
(1) Cuddapah Thermal Station	1,34,400
(2) Pension charges	2,100
Total, 81. II. G. Cuddapah Thermal Scheme ..	1,36,500
III. Thermo Electric Scheme (Post-war Reconstruction)—	
A. Visakhapatnam Power House Extensions	1,70,200
B. Basin Bridge Power Station Extensions	97,97,500
C. Vijayavada-Rajahmundry-Samalkot Extensions	27,98,200
D. Nellore Thermal Scheme	13,96,400

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APPENDIX C.

Details of the establishment charges of the department and fee earned during 1948–49 *and estimated for* 1949–50.

	Expenditure in 1948–49. RS.	Budget, 1949–50. RS.
Chief Engineer, Chief Operation Engineer (South), Chief Operation Engineer (North), Chief Construction Engineer (Electricity) Offices including Technical Branch—		
Salaries, allowances, works, etc.	7,90,784	10,09,600
Charges payable to or recoverable from Government and Departments.	(—) 2,62,193	(—) 13,95,400
Net salaries and allowances	5,28,591	(—) 3,85,800
Pykara Hydro-Electric Scheme—		
Salaries, and allowances	7,04,153	7,32,500
Less charges payable to or recoverable from Government ..	(—) 1,46,520	(—) 94,200
Net salaries and allowances	5,57,633	6,38,300
Operation and Maintenance expenses	25,55,050	25,74,700
Total ..	31,12,683	32,13,000
Revenue ..	71,77,627	73,32,700
Net surplus ..	40,64,944	41,19,700
Mettur Hydro-Electric Scheme—		
Salaries, allowances, etc.	6,39,425	7,67,100
Less charges payable to or recoverable from Government Departments and others	(—) 73,812	(—) 5,94,300
Net salaries and allowances	5,65,313	1,72,900
Operation and Maintenance expenses	24,19,301	27,03,900
Total ..	29,84,614	28,76,700
Revenue ..	62,05,001	68,05,500
Net surplus ..	32,20,387	39,28,800
Papanasam Hydro-Thermal Scheme—		
Salaries, allowances, etc.	3,60,750	3,91,000
Less charges payable to or recoverable from Government Departments and others	(—) 21,145	(—) 84,600
Net salaries and allowances	3,39,605	3,06,400
Operation and Maintenance expenses	8 24,304	13,52,000
Total ..	11,63,909	16,58,400
Revenue ..	29,14,585	30,10,400
Net surplus ..	17,50,676	13,52,000
Kollegal Hydro-Electric Scheme—		
Salaries, allowances, etc.	3,494	400
Less charges payable to or recoverable from Government Departments and others	..	100
Net salaries and allowances	3,494	500
Operation and Maintenance expenses	7,360	25,300
Total ..	10,854	25,800
Revenue ..	12,004	30,000
Net surplus ..	1,150	4,200

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APPENDIX C—*cont.*

Details of the establishment charges of the department and fee earned during 1948–49 *and estimated for* 1949–50—cont.

	Expenditure 1948–49.	Budget, 1949–50.
	RS.	RS.
Visakhapatnam Scheme—		
Salaries, allowances, etc.	1,30,593	1,35,400
Less charges payable to or recoverable from Government Departments and others	(—) 3,999	(—) 39,200
Net salaries and allowances	1,26,594	96,200
Operation and Maintenance expenses	5,63,720	5,87,400
Total ..	6,90,314	6,83,600
Revenue ..	8,59,830	11,12,400
Net surplus ..	1,68,516	4,28,800
Vijayavada Scheme—		
Salaries, allowances, etc.	1,42,720	1,55,100
Less charges payable or recoverable from Government Departments and others	(—) 15,275	(—) 32,800
Net salaries and allowances	1,26,945	1,22,300
Operation and Maintenance expenses	11,55,799	10,06,900
Total ..	12,82,744	11,29,200
Revenue ..	12,82,051	14,26,100
Net deficit ..	693	2,96,900
Kakinada Scheme—		
Salaries, allowances, etc.	44,367	44,100
Less charges payable to or recoverable from Government Departments and others	(—) 11,024	(—) 44,100
Net salaries and allowances	33,343	..
Operation and Maintenance expenses	2,00,741	3,93,700
Total ..	2,34,084	3,93,700
Revenue ..	2,32,321	2,96,800
Net deficit ..	(—) 1,763	(—) 96,900
Kurnool Scheme—		
Salaries, allowances, etc.	13,610	20,200
Less charges payable to or recoverable from Government Departments and others	171	(—) 5,700
Net salaries and allowances	13,781	14,500
Operation and Maintenance expenses	82,010	79,700
Total ..	95,791	94,200
Revenue ..	1,62,475	1,16,500
Net surplus ..	66,684	22,300
Madras Thermal Scheme—		
Salaries, allowances, etc.	6,79,843	6,80,800
Less charges payable to or recoverable from Government Departments and others	(—) 16,813	(—) 85,800
Net salaries and allowances	6,63,030	5,95,000
Less Operation and Maintenance expenses	63,35,082	68,65,300
Total ..	69,98,112	74,60,300
Revenue ..	80,04,133	83,32,400
Net surplus ..	10,06,021	8,72,100

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APPENDIX C—*cont.*

Details of the establishment charges of the department and fee earned during 1948–49 *and estimated for* 1949–50—cont.

	Expenditure, 1948-49. Rs.	Budget, 1949-50. Rs.
Cuddapah Thermal Scheme—		
Salaries, allowances, etc.	1,417	16,900
Less charges payable to or recoverable from Government Departments and others	..	10,500
Net salaries and allowances	1,417	6,400
Operation and Maintenance expenses	37,038	1,18,800
Total ..	38,455	1,25,200
Revenue ..	28,003	1,00,800
Net deficit ..	10,452	24,400

	1948.	
	Revenue. Rs.	Expenditure. Rs.
Chief Electrical Inspector to Government—		
(i) From inspections under the Indian Electricity Act, Cinematograph Act, trusts and miscellaneous receipts.	1,20,674	..
(ii) From penalty for excess consumption of electricity ..	1,11,701	..
(iii) From Madras Electricity Duty Act, 1937	11,16,292	..
(iv) From use of Government water for generation of electricity	20,213	..
Total ..	13,68,880	1,75,200

APPENDIX D-1.

Licensee electric supply undertakings in service at the end of the year.

(a) Local authorities.

1 Anantapur
2 Alandur
3 Bellary
4 Vijayavada
5 Bodinayakanur
6 Kakinada
7 Coimbatore
8 Kancheepuram
9 Coonoor
10 Dindigul
11 Dharapuram
12 Hospet
13 Hindupur
14 Karur
15 Kodaikanal
16 Masulipatnam
17 Mathurai
18 Ootacamund
19 Palni
20 Pollachi
21 Periyakulam
22 Rameswaram (Section 28)
23 Semblum (Section 28)
24 Sivakasi
25 Tiruppur
26 Tanjore
27 Tiruvottiyur
28 Tiruvannamalai
29 Tiruvallur
30 Tiruppattur
31 Udamalpet
32 Virudunagar
33 Villivakkam
34 Wellington (Cantonment)

(a) Local authorities—cont.

(b) Companies.

1 Adoni
2 Ambur-Vaniyambadi
3 Anakapalle
4 British Cochin
5 Bobbili
6 Kozhikode
7 Chingleput
8 Chittoor
9 Chicacole
10 Devakottai
11 Eluru
12 East Ramnad
13 Guntur
14 Gudiyattam
15 Gudivada
16 Kanadukathan
17 Karaikudi
18 Kumbakonam
19 Mangalore
20 Mayuram-Mannargudi-Tiruvarur

(b) Companies—cont.

21 Nattarasankottai
22 Nellore
23 Narasaraopet
24 Nagapattinam
25 Neikuppai
26 Okkur
27 Ongole
28 Palghat
29 Proddatur
30 Rajahmundry
31 South Arcot
32 Salem-Erode
33 Srivilliputtur
34 Salur-Parvatipur
35 Tiruchirappalli-Srirangam
36 Tirumalai-Tirupati
37 Tirunelveli-Tuticorin-Palamcottah
38 Tellicherry-Cannanore
39 Udipi
40 Visakhapatnam
41 Vellore
42 Kasaragod (Section 28)

Pudukkottai Licensees.

43 Pudukkotai-Electric Supply Corporation.
44 Pudukkotai State Corporation
45 Ramachandrapuram
46 Ponnamaravathy

NOTE.—The Cuddapah, Kollegal and Valparai undertakings were taken over from the respective licensees durinag 1948-49.

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APPENDIX D-2.

Licensees under construction.

One East Coast Licensee.

APPENDIX D-3.

New applications for licence received—Nil.

One application under section 28 of the Indian Electricity Act from Messrs. Canara Ceramics, Kasaragod, has been sanctioned.

APPENDIX D-4.

List of undertakings put into service during 1948–49—Nil.

APPENDIX D-5.

List of licensees who reduced the tariff during the year 1948–49.

1 Palghat. 2 Devakottai.

APPENDIX D-6.

List of licensees who increased the tariffs during the year 1948–49—Nil.

APPENDIX D-7.

List of licensees charging more than 6 annas per unit for lighting and fans.

1 Adoni.

APPENDIX E.

Total capacities of plants installed in electric supply undertakings in service in the Province.

Serial number and name of undertaking.	Total installed capacity of plant in generating station.	Details of plant installed.	Type of prime mover.	Voltage generation.
(1)	(2)	(3)	(4)	(5)
		I.—Licensee undertakings.		
1 Adoni	436 K.V.A. ..	2 × 190 + 1 × 56 K.V.A. ..	Oil engine	.. 3·3 K.V. (A.C.)
2 Anantapur	190 K.V.A. ..	2 × 79 + 1 × 32 K.V.A. ..	Do.	.. 400 V. (A.C.).
3 Chicacole	150·75 K.V.A.	1 × 112 + 1 × 20 K.V.A. + 1 × 18·75 K.V.A.	Do.	.. 400 V. (A.C.).
4 Bellary	480 K.V.A. .. 163 K.W. (D.C.).	2 × 240 K.V.A. (A.C.) .. 1 × 96 + 1 × 67 K.W. (D.C.)	Do.	.. 460/500 V. (D.C.). and 400 V (A.C.).
5 Hindupur	60 K.W. ..	2 × 25 + 1 × 10 K.W. ..	Do.	.. 484 V. (D.C.).
6 Hospet	125 K.V.A. ..	1 × 50 + 1 × 75 K.V.A. ..	Do.	.. 400 V. (A.C.).
7 Mangalore	937·5 K.V.A. ..	3 × 312·5 K.V.A.	Do.	.. 3·3 K.V. (A.C.).
8 Narasaraopet ..	200 K.V.A. ..	2 × 100 K.V.A.	Do.	.. 420/243 V. (A.C.).
9 Nellore	490 K.V.A. ..	1 × 64 + 2 × 133 + 1 × 160 K.V.A.	Do.	.. 400 V. (A.C.).
10 Ongole	116·6 K.V.A. ..	1 × 66·6 + 1 × 50 K.V.A. ..	Do.	.. 3·3 K.V. and 400 V. (A.C.).
11 Proddatur	120 K.V.A. ..	2 × 160 K.V.A.	Do.	.. 400 V. (A.C.).
12 Rajahmundry ..	560 K.V.A. ..	2 × 133 + 1 × 294 K.V.A. ..	Do.	.. 3·3 K.V. (A.C.).
13 Salur-Parvatipur.	25 K.V.A. ..	1 × 25 K.V.A.	Do.	.. 400/440 V. (A.C).
14 Udipi	184 K.V.A. ..	1 × 144 + 1 × 40 K.V.A. ..	Do.	.. 400 V. (A.C.)
15 • British Cochin ..	147·4 K.V.A. ..	2 × 46·2 + 1 × 55 K.V.A. ..	Do.	.. 2·2 K.V. (A.C.)
Total ..	4,162·25 K.V.A. 223·00 K.W.	A.C. or 3,329·8 K.W. D.C. or 223·0 K.W.		
		3,552·8 K.W.		

• *British Cochin.*—The licensee has changed over completely to Hydro-Electric supply. But his engines are still kept idle in his power house.

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APPENDIX E—*cont.*

Total capacities of plants installed in electric supply undertakings in service in the Province—cont.

Serial number and name of undertaking.	Total installed capacity of plant in generating station.	Details of plant installed.	Type of prime mover.	Voltage, generation.
(1)	(2)	(3)	(4)	(5)
		II.—Government undertakings.		
1 Pykara	48,430 K.V.A...	3 × 7,810 K.V.A.	..	1,20,180 K.V.A.
2 Mettur	50,000 ,, ..	2 × 12,500 ,, ...		
3 Papanasam ..	21,750 ,, ..	4 × 12,500 ,, ...		
		3 × 7,250 ,, ...		
4 Madras	60,000 ,, ..	2 × 1,875 K.V.A. + 1 × 6,250 K.V.A. + 1 × 7,500 K.V.A. + 1 × 15,625 K.V.A. + 1 × 18,750 K.V.A. + 1 × 1,875 K.V.A. (Villivakkam) 2 × 3,125 K.V.A. (Transportable power sets).	..	60,000 K.V.A.
5 Visakhapatnam ..	4,687·5 ..	2 × 1,875 K.V.A. + 1 × 937·5 K.V.A.		
6 Vijayavada ..	7,500 K.V.A...	2 × 1,875 K.V.A. + 1 × 3,750 K.V.A.		
7 Kakinada	1,169 ,, ..	2 × 100 K.V.A + 1 × 312 K.V.A. + 1 × 375 K.V.A. + 1 × 62·5 K.V.A. + 1 × 220 K.V.A.	..	14,720 K.V.A.
8 Kurnool	770·9 ,, ..	1 × 53·4 K.V.A. + 1 × 270 K.V.A. + 1 × 80 K.V.A. + 1 × 187·5 K.V.A. + 1 × 180 K.V.A.		
9 Cuddapah	601·6 ,, ..	4 × 21·9 K.V.A.		
		1 × 94 K.V.A.		
		2 × 210 K.V.A.		
				1,94,909 K.V.A. or 1,55,927 K.W.
		Total installed generating capacity of electrical undertaking in the Province		1,55,927·2 K.W. 3,552·8 K.W.
				1,59,480 K.W. or 1,99,294 K.V.A.

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APPENDIX

Table of electric supply cost and

Serial number and name of undertaking.	Year of operation.	Year of accounts to which the figures refer.	System and supply of voltage.	Total generation or purchase cost per unit.	Working cost per unit sold. *See* Note (2).	Revenue per	
						Lights and fans.	Power.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
				AS.	AS.	AS.	AS.
1 Adoni	10th ..	1947 ..	A.C. 400/230 V, 50 cycles.	1·97	4·79	7·99	2·19
2 Ambur-Vaniambadi.	11th ..	1947–48 ..	Do. ..	0·62	1·86	4·49	0·98
3 Anakapalle ..	10th ..	1947–48 ..	Do. ..	1·40	3·30	4·50	1·52
4 British Cochin ..	24th ..	1947–48 ..	Do. ..	1·09	4·55	5·21	3·59
5 Bobbili	10th ..	1947–48 ..	Do. ..	1·35	2·86	4·67	1·22
6 Kozhikode	19th ..	1947–48 ..	Do. ..	0 63	3·08	4·39	2·35
7 Chittoor	14th ..	1947–48 ..	Do. ..	0·71	2·51	4·58	1·30
8 Cuddapah							[*See* Note
9 Chingleput ..	10th ..	1947–48 ..	A.C. 400/230 V, 50 cycles.	0·64	1·54	3·66	1·17
10 Cannanore-Tellicherry. ..	10th ..	1947–48 ..	Do. ..	0·84	3·38	5·50	1·04
11 Chicacole	10th ..	1947–48 ..	Do. ..	3·87	6·95	5·78	1·97
12 Devakottai ..	24th ..	1947–48 ..	Do. ..	0·68	2·74	4·68	1·54
13 East Tanjore ..	14th ..	1947–48 ..	Do. ..	0·50	1·64	3·85	0·89
14 East Ramnad ..	10th ..	1947–48 ..	Do. ..	0·51	1·14	4·90	0·74
15 East Coast ..				Supply not yet commenced—No audited			
16 Eluru	11th ..	1947–48 ..	A.C. 400/230 V, 50 cycles.	1·09	3·33	5·95	1·14
17 Guntur ..	16th ..	1947–48 ..	Do. ..	0·87	2·62	5·14	1·55
18 Gudiyattam ..	11th ..	1947–48 ..	Do. ..	0·60	1·27	4·37	1·25
19 Gudivada	11th ..	1947–48 ..	Do. ..	1·27	3·31	4·95	1·29
20 Kanadukathan ..	24th ..	1947–48 ..	Do.	0·66	2·00	4·66	1·42
21 Kumbakonam ..	16th ..	1947 ..	Do. ..	0·57	2·17	4·30	1·07
22 Karaikudi	18th ..	1947–48 ..	Do. ..	0·71	2·37	3·52	1·31
23 Madras					Taken over by Government		
24 Mangalore	15th ..	1947–48 ..	A C. 400/230 V, 50 cycles	1·11	3·58	5·25	1·89
25 Nellore	14th ..	1947–48 ..	Do. ..	1·64	3·85	5·97	2·22
26 Nagapattinam ..	13th ..	1947 ..	Do. ..	0·70	1·49	3·64	1·30
27 Nattarasankottai ..	15th ..	1947–48 ..	Do. ..	0·75	2·25	5·34	1·19
28 Narasaraopet ..	10th ..	1947–48 ..	Do. ..	3·20	4·73	5·57	1·95
29 Nelkuppai	9th ..	1947–48 ..	Do. ..	0·79	2·36	4·72	1·17
30 Okkur	13th ..	1947–48 ..	Do. ..	0·70	3·12	5·42	1·35
31 Ongole							[*See* Note
32 Palghat	15th ..	1947–48 ..	Do. ..	0·69	2·32	3·45	0·95
33 Ponnani				Supply not yet commenced—No audited			
34 Prodattur ..							[*See* Note
35 Rajahmundry ..	20th ..	1947–48 ..	A.C. 400/230 V, 50 cycles.	1·06	3·47	5·09	1·65
36 Salem-Erode ..	16th ..	1947–48 ..	Do. ..	0·56	1·27	5·12	0·91
37 South Arcot ..	13th ..	1947–48 ..	Do. ..	0·46	1·10	4·84	1·05
38 Salur-Parvatipur ..	9th ..	1947–48 ..	Do. ..	1·91	6·47	5·30	1·91
39 Srivilliputtur ..	10th ..	1947 ..	Do. ..	0·49	0·99	4·26	0·70
40 Tiruchirappalli-Srirangam.	20th ..	1947–48 ..	Do. ..	0·34	0·80	3·13	0·56
41 Tirunelveli-Tuticorin.	15th ..	1947–48 ..	Do. ..	0·50	2·13	3·53	1·45
42 Tirumalai Tirupati							[*See* Note
43 Udipi	9th ..	1947–48 ..	A.C. 400/230 V, 50 cycles.	2·17	4·50	5·59	2·15
44 Vellore	17th ..	1947–48 ..	Do. ..	0·63	2·04	4·13	0·98
45 Visakhapatnam ..	14th ..	1947–48 ..	Do. ..	1·07	2·35	4·18	1·35
46 Valparai							No

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F-1.

records—Companies.

unit sold.			Total—Expenditure against revenue. *See* Note (2).	Total revenue from the electric supply.	Total revenue from working. *See* Note (3).	Net profit (+) or (—) up to the end of the year (as per general balance sheet.)	Total capital expenditure up to the end of the year.	Serial number.
Special contract.	Street lighting.	Total—(*See* Note 3.)						
(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	
AS.	AS.	AS.	RS.	RS.	RS.	RS.	RS.	
..	6·60	6·28	54,951	67,469	72,064	14,650	2,50,001	1
..	3·35	2·17	1,23,823	1,33,262	1,45,875	14,359	3,66,063	2
..	4·22	3·91	54,363	55,976	64,618	5,061	1,10,159	3
..	4·36	5·02	52,016	54,951	57,538	5,522	1,26,025	4
..	2·99	2·70	35,623	28,458	33,619	— 2,004	52,193	5
..	2·97	3·56	4,00,659	4,44,358	4,64,968	41,083	10,76,270	6
..	3·10	3·01	86,414	98,410	1,03,619	12,459	2,51,075	7
(4) below.]								8
..	2·00	1·81	72,742	78,390	85,995	10,406	2,02,558	9
..	4·09	3·43	1,54,028	1,33,215	1,57,398	6,397	4,55,696	10
..	3·37	6·79	53,531	35,304	53,388	8,437	1,84,194	11
..	1·61	3·07	85,604	87,689	98,578	19,992	2,68,465	12
2·99	1·84	1·80	6,85,476	6,57,463	7,58,811	—1,12,506	24,63,164	13
3·22	1·88	1·31	3,24,892	3,35,705	3,76,679	4,867	8,81,625	14
statement of accounts for 1947–48.								15
..	5·61	3·53	1.11,116	1,04,613	1,21,295	10,682	3,01,692	16
..	1·96	2·79	3,79,176	3,63,804	4,06,194	28,394	8,66,294	17
0·75	3·62	1·47	1,68,490	1,87,552	1,95,857	19,352	3,06,705	18
1·77	3·12	3·49	41,758	40,159	46,357	4,629	1,04,176	19
0·75	1·91	2·51	1,24,750	1,36,742	1,58,385	33,864	6,86,407	20
2·00	1·93	2·53	3,60,585	3,88,162	4,23,314	42,052	12,23,361	21
4·27	1·62	2·74	1,26,490	1,37,574	1,48,579	37,249	4,34,695	22
on 21st August 1947.								23
..	2·06	3·63	3,85,812	3,61,929	3,97,522	11,710	9,54,639	24
1·51	1·32	4·10	1,70,221	1,32,369	1,82,402	11,056	4,92,079	25
0·70	1·75	1·69	1,91,274	1,96,820	2,17,403	22,322	4,12,746	26
..	2·00	3·02	48,087	57,937	65,101	17,013	1,78,402	27
2·80	2·75	5·86	45,021	34,434	55,951	11,515	1,37,146	28
0·76	1·96	2·64	27,572	21,648	29,077	1,505	96,314	29
..	1·84	3·02	79,667	67,266	78,798	— 4,124	2,41,726	30
(4) below.]								31
..	1·69	2·50	1,37,599	1,39,191	1,48,648	11,536	3,06,623	32
statement of accounts for 1947–48.								33
(4) below.]								34
..	3·55	3·52	2,48,972	2,41,503	2,53,434	5,468	5,61,586	35
0·73	1·80	1·44	8,13,672	9,29,872	9,32,129	— 4,607	13,33,068	36
0·76	1·96	1·40	7,47,454	8,30,670	8,87,094	78,380	18,41,418	37
..	2·08	6·44	34,083	22,419	34,737	967	1,13,199	38
2·33	3·23	1·14	2,09,549	2,30,455	2,48,345	52,706	3,83,897	39
0·04	1·65	0·87	12,07,822	12,34,817	13,26,420	3,14,967	35,67,315	40
1·81	2·00	2·43	6,10,732	6,45,675	7,05,695	45,020	14,08,424	41
(4) below.]								42
1·87	3·15	4·65	62,455	56,368	64,980	3,677	2,45,269	43
..	2·62	2·34	3,72,639	4,08,397	4,38,184	41,201	7,45,837	44
1·38	1·08	2·58	3,01,478	3,13,972	3,33,152	21,848	5,75,272	45
accounts.								46

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APPENDIX

Table of electric supply cost and

Serial number and name of undertaking.	Year of operation.	Year of accounts to which the figures refer.	Depreciation for the year.	Depreciation fund at the end of the year.	Other reserves, special reserve at the end of the year.	Total capacity.	Maximum load on the feeders.
			(17)	(18)	(19)	(20)	(21)
			RS.	RS.	RS.		
1 Adoni	10th	1947 ..	8,000	42,899	..	346 K.W.	145 K.W.
2 Ambur-Vaniambadi.	11th	1947-48 ..	19,077	79,515	..	775 K.W.	467·5 K.W.
3 Anakapalle ..	10th	1947-48 ..	4,316	32,487	..	200 K.W.	123 K.W.
4 British Cochin ..	24th	1947-48 ..	4,550	50,103	..	105 K.W.	64 K.W.
5 Bobbili	10th	1947-48 ..	2,146	17,497	1,060	275 K.V.A.	103 K.W.
6 Kozhikode	19th	1947-48 ..	43,737	3,97,637	..	820 K.W.	820 K.W.
7 Chittoor	14th	1947-48 ..	9,373	59,046	..	475 K.V.A.	204 K.W.
8 Cuddapah							[*See* Note
9 Chingleput ..	10th	1947-48 ..	9,416	40,465	1,000	525 K.V.A.	209 K.W.
10 Cannanore-Tellicherry.	10th	1947-48 ..	42,338	97,207	..	430 K.V.A.	410 K.W.
11 Chicacole	10th	1947-48 ..	..	20,000	Chicacole, 92 K.V.A. Narasannapet, 15 K.V.A.		82 K.W. 17 K.W.
12 Devakottai ..	24th	1947-48 ..	8,359	1,03,392	26,399	285 K.V.A.	261 K.W.
13 East Tanjore ..	14th	1947-48 ..	66,576	5,62,205	..	6,186	Tiruvarur, 2,160 K.W. Vallam, 116 K.W. Arantangi, 79 K.W.
14 East Ramnad ..	10th	1947-48 ..	24,980	1,91,109	..	5,870	Sivaganga, 1,418 Singampenerl, 46
15 East Coast						Supply not yet commenced—No audited	
16 Elurn	11th	1947-48 ..	11,357	98,159	..	..	208 K. W.
17 Guntur	16th	1947-48 ..	49,500	2,23,000	5,558	..	First point 766·7 K.V.A. Second point 74 K.W.
18 Gudiyattam ..	11th	1947-48 ..	18,458	81,117	..	..	636 K.W.
19 Gudivada ..	11th	1947-48 ..	3,709	27,733	..	175 K.V.A.	100 K.W.
20 Kanadukathan ..	24th	1947-48 ..	..	2,05,987	..	755 K.V.A.	466·59 K.V.A.
21 Kumbakonam ..	16th	1947 ..	42,295	3,22,782	65,543	2,343	1,210 K.V.A.
22 Karaikudi	18th	1947-48 ..	13,851	1,82,002	286	1386·7	335 K.V.A.
23 Madras							Taken over by Government
24 Mangalore	15th	1947-48 ..	41,738	4,97,456	..	750	594 K.V.A.
25 Nellore	14th	1947-48 ..	15,300	75,000	778	376	298 K.V.A.
26 Negapatam ..	13th	1947 ..	14,445	1,19,784	..	..	1,180 K.V.A.
27 Nattarasankottai ..	15th	1947-48 ..	6,689	59,703	..	Nil.	150 K.V.A.
28 Narasaraopet ..	10th	1947-48 ..	..	9,000	..	160 K.W.	80 K.W.
29 Nellkuppai	9th	1947-48 ..	4,056	32,327	..	Nil.	80 K.W.
30 Okkur	13th	1947-48 ..	11,225	61,969	1,599	..	166 K.W.
31 Ongole							[*See* Note
32 Palghat	15th	1947-48 ..	11,792	1,10,030	1,750	425 K.V.A.	375 K.W.
33 Ponnani						Supply not yet commenced—No audited	
34 Proddatur ..							[*See* Note
35 Rajahmundry ..	20th	1947-48 ..	13,177	2,60,628	..	435 K.W.	356 K.W.
36 Salem-Erode ..	16th	1947-43 ..	62,979	6,15,777	60,000	11,140 K.V.A.	Salem, 2,080 Erode, 508 Villages, 384
37 South Arcot ..	13th	1947-48 ..	80,837	3,79,218	49,500	..	Villupuram, 3,100 K.W Chidambaram, 227 K.W
38 Salur-Parvatipur ..	9th	1947-48 ..	5,000	12,407	..	..	Parvathipur, 20 K.W. Salur, 50 K.V.A.
39 Srivilliputtur ..	10th	1947 ..	14,785	85,647	..	1,875 K.V.A.	740 K.W.
40 Tiruchirappalil-Srirangam.	20th	1947-48 ..	1,05,551	9,07,985	20,000	14,020 K.V.A.	Tiruchirappalli 5,040 K.W. Mayanoor, 136 K.W.
41 Tirunelveli-Tuticorin.	13th	1947-48 ..	62,320	5,74,125	..	2,000 K.V.A.	1,180 K.W.
42 Tirumalai-Tirupati.							[*See* Note
43 Udipi	9th	1947-48 ..	..	13,500	..	157 K.V.A.	144 K.W.
44 Vellore	17th	1947-48 ..	37,254	2,62,145	28,122	..	1,015 K.W.
45 Visakhapatnam ..	14th	1947-48 ..	22,535	2,05,045	49,299	2,164 K.V.A.	785 K.W.
46 Valparai							No accounts.

Notes.—(1) All the figures have been calculated on a uniform basis according to standard
(2) Total expenditure including interest, income-tax paid, preference-dividends, less service connexion charges.
(3) Excludes service connexion charges as given in the debtor side of the No. IV
(4) Figures will be furnished later on receipt of audited statement of accounts

Koviloor Acadamy

F-1—*cont.*

records—Companies—cont.

Total units generated for the year. (22)	Total units purchased for the year. (23)	Load factor per cent. (24)	Total number of units sold for the year. (25)	Total number of consumers at the end of the year. (26)	Dividend declared on ordinary shares for the year. (27)	Serial number.
221,140	..	14·44	183,429	503	6 per cent tax free.	1
..	1,255,467	26·05	1,067,940	1,657	4 per cent.	2
..	315,006	24·5	263,884	446	3 per cent tax free.	3
2,106	212,180	32·65	183,054	374	3 per cent.	4
..	232,890	22·11	199,475	244	....	5
..	2,518,507	28·85	2,078,384	2,796	5 per cent tax free.	6
..	637,507	30·75	550,206	1,096	6 per cent tax free.	7
(4) below].						8
..	836,141	41·21	754,411	614	5 per cent tax free.	9
780,712	..	20·21	728,812	1,551	5 per cent tax free.	10
158,003	..	14·18	123,256	600	....	11
.	715,102	21·94	501,688	1,112	6 per cent.	12
} ..	8,413,115	{ 33·41 / 26·40 / 16·77 }	6,705,614	10,272	7½ per cent.	13
} ..	5,221,548	{ 36·61 / 20·39 }	4,561,444	3,127	7½ per cent.	14
statement of accounts for 1946–47.						15
.	606,369	29·30	533,888	1,186	5 per cent.	16
} ..	2,796,830	32·55	2,319,294	2,506	4 per cent.	17
..	2,258,456	37·96	2,120,942	1,383	6½ per cent tax free.	18
..	214,264	23·01	202,136	515	4½ per cent.	19
..	1,274,687	24·44	999,890	1,624	....	20
..	3,444,157	25·08	2,657,958	4,823	6 per cent.	21
..	1,038,050	29·12	854,591	1,414	9 per cent.	22
on 21st August 1947.						23
2,040,260	..	33·20	1,727,533	2,497	5 per cent.	24
859,256	..	27·03	706,561	1,055	....	25
..	2,151,014	20·00	2,044,964	1,790	6½ per cent.	26
..	408,713	25·97	341,175	858	3 per cent.	27
163,897	..	21·73	152,329	630	3 per cent.	28
..	202,478	27·54	193,013	499	....	29
..	587,363	28·08	408,366	644	....	30
(4) below].						31
..	1,121,158	28·90	949,298	1,824	5½ per cent.	32
statement of accounts for 1946–47.						33
(4) below·]						34
1,335,902	..	36·84	1,148,906	1,190	2 per cent.	35
} ..	11,444,530	{ 40·36 / 38·93 / 34·69 }	10,253,637	5,826	10 per cent.	36
} ..	12,358,131	{ 34·35 / 36·58 }	10,056,903	4,810	5 per cent.	37
21,032 Parvathipur; 18 K.W. Salur, 41.	80,030	{ Parvathipur, 11·44 / Salur, 18·46 }	84,331	390	....	38
..	3,548,830	52·19	3,383,371	1,809	5½ per cent.	39
..	26,961,026	54·23	24,146,902	12,718	7½ per cent.	40
..	5,155,470	44·36	4,585,664	5,032	7½ per cent.	41
(4) below.]						42
258,021	..	17·44	222,075	715	....	43
..	3,261,589	32·84	2,919,434	3,945	7½ per cent.	44
..	2,493,632	29·90	2,055,926	2,000	4 per cent.	45
						46

practice.
amounts written off towards preliminary xpenses and interest paid on consumers' security deposits, etc., but
Revenue Account.
for 1947–48.

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APPENDIX

Table of electric supply costs and

Serial number and name of undertaking.	Year of operation.	Year of accounts to which the figures refer.	System and voltage of supply.	Total generation or purchase cost per unit.
(1)	(2)	(3)	(4)	(5)
				AS.
1 Alandur	13th	1947–48	.. A.C. 400/230 V. 50 cycles	1·20
2 Anantapur	10th ..	Do.	.. Do.	2·03
3 Bellary	21st ..	Do.	.. D.C. 460/230 V. A.C. 400/230 V. 50 cycles	1·61
4 Vijayavada	18th ..	Do.	.. A.C. 400/230 V. 50 cycles	0·79
5 Bodinayakkanur				[*See* Note
6 Coimbatore				[*See* Note
7 Kakinada	19th	1947–48	.. A.C. 400/230 V. 50 cycles	1·03
8 Kancheepuram	17th ..	Do.	.. Do. ..	0·66
9 Coonoor	19th ..	Do.	.. Do. ..	0·75
10 Dindigul				[*See* Note
11 Dharapuram				[*See* Note
12 Hindupur	18th	1947–48	.. D.C. 400/230 V. ..	3·10
13 Hospet	13th ..	Do.	.. A.C. 400/230 V. 50 cycles	3·27
14 Karur	12th ..	Do.	.. Do. ..	0·71
15 Kodaikanal	10th ..	Do.	.. Do. ..	0·82
16 Kollegal				[*See* Note
17 Mathural	21st	1947–48	.. A.C. 400/230 V. 50 cycles	0·54
18 Masulipatnam	15th ..	Do.	.. Do. ..	1·09
19 Ootacamund	25th ..	Do.	.. Do. ..	0·62
20 Pollachi			..	[*See* Note
21 Palni	13th	1947–48	.. A.C. 400/230 V. 50 cycles	0·77
22 Periyakulam	13th ..	Do.	.. Do. ..	0·76
23 Rameswaram (Panchayat Board) ..	9th ..	Do.	.. Do. ..	3·44
24 Sembiem			..	[*See* Note
25 Sivakasi	12th	1947–48	.. A.C. 400/230 V. 50 cycles	0·74
26 Tiruvallur				[*See* Note
27 Tiruppur	14th	1947–48	.. A.C. 400/230 V. 50 cycles.	0·65
28 Tanjore	20th ..	Do.	.. Do. ..	0·59
29 Tiruvottiyur	15th ..	Do.	.. Do. ..	1·10
30 Tiruppattur (North Arcot.) ..	10th ..	Do.	.. Do. ..	0·83
31 Tiruvannamalai	10th ..	Do.	.. Do. ..	0·74
32 Udamalpet	13th ..	Do.	.. Do. ..	0·76
33 Virudunagar	14th ..	Do.	.. Do. ..	0·65
34 Villivakkam				[*See* Note
35 Wellington Cantonment.				Figures not

Koviloor Acadamy

F-2.

records—Local authorities.

Working cost per unit sold—*See* Note (2).	Revenue per unit sold. Lights and fans.	Power.	Special contract.	Street lighting.	Total—*See* Note (3).	Total expenditure against revenue—*See* Note (2).	Revenue from electric supply.	Serial number.
(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	
AS.	AS.	AS.	AS.	AS.	AS.	RS.	RS.	
2·61	3·94	1·55	2·77	2·80	3·04	29,087	28,425	1
4·70	6·03	2·18	..	2·04	5·07	45,339	39,128	2
4·60	5·04	2·43	3·51	2·50	4·84	1,35,266	1,15,838	3
1·64	3·77	1·03	0·86	1·93	1·90	3,01,047	3,31,144	4
(4) below.]								5
(4) below.]								6
2·56	3·81	1·26	..	1·95	2·81	1,43,965	1,43,030	7
2·00	3·83	1·15	..	1·93	2·58	1,41,537	1,63,308	8
2·18	3·63	1·14	..	1·35	2·44	91,982	98,623	9
(4) below.]								10
(4) below.]								11
8·51	6·50	1·73	..	3·51	7·66	37,620	19,045	12
11·45	6·34	1·08	..	3·81	7·00	72,517	28,528	13
1·81	4·06	0·93	..	2·00	2·28	71,852	86,234	14
4·00	5·98	2·02	..	2·00	5·00	44,537	49,918	15
(4) below.]								16
1·05	3·07	0·88	0·71	1·25	1·77	5,22,943	8,79,821	17
3·74	5·58	1·31	0·91	2·96	4·09	1,34,480	1,15,611	18
1·68	2·92	1·08	0·93	2·00	1·78	2,52,062	2,57,827	19
(4) below.]								20
1·81	3·43	0·99	..	2·00	2·47	52,408	68,121	21
1·93	3·87	1·01	..	2·00	2·46	35,755	42,062	22
7·99	6·69	..	..	4·00	6·91	6,452	4,453	23
(4) below.]								24
1·90	3·94	0·99	1·74	2·00	2·11	50,649	51,156	25
(4) below.]								26
1·40	3·59	1·01	..	2·00	1·88	1,19,002	1,50,506	27
1·39	3·09	1·05	0·56	1·88	1·90	1,80,621	2,31,137	28
1·79	4·28	1·02	2·25	2·50	1·65	49,283	43,176	29
2·40	4·03	1·10	..	2·01	2·58	46,473	46,659	30
1·76	3·48	0·97	1·54	2·00	1·98	53,455	57,450	31
1·84	3·86	0·96	..	1·75	2·14	51,515	51,564	32
1·54	3·66	0·92	..	2·05	2·00	1,05,728	1,30,201	33
(4) below.]								34
available.—Exempted by Government from submitting the accounts in the prescribed form.								35

Koviloor Acadamy

APPENDIX

Table of electric supply costs and

	Total revenue from working—*See* Note (3).	Net profit (+) or (—) up to the end of the year as per General balance sheet.	Loans repaid during the year.	Total capital expenditure up to the end of the year.
	(14)	(15)	(16)	(17)
	RS.	RS.	RS.	RS.
1 Alandur	33,042	14,601	3,194	69,783
2 Anantapur	48,958	3,943	71,310	1,80,231
3 Bellary	1,42,422	35,816	17,816	3,85,582
4 Vijayavada	3,53,399	52,713	26,607	4,88,357
5 Bodinayakkanur				[*See* Note
6 Coimbatore				[*See* Note
7 Kakinada	1,58,008	— 23,901	19,499	3,82,173
8 Kanchipuram	1,82,721	81,080	22,838	4,79,344
9 Coonoor	1,03,790	8,486	9,357	2,23,128
10 Dindigul				(*See* note
11 Dharapuram				(*See* note
12 Hindupur	33,850	— 3,770	6,621	1,37,615
13 Hospet	44,315	— 72,794	19,034	1,90,643
14 Karur	90,961	24,156	7,207	1,58,257
15 Kodaikanal	57,012	33,003	10,334	1,33,467
16 Kollegal				[*See* Note
17 Mathurai	9,01,380	4,83,856	..	11,69,308
18 Masulipatnam	1,47,323	37,177	28,611	2,33,355
19 Ootacamund	2,63,213	943	29,859	8,62,116
20 Pollachi				[*See* Note
21 Palni	95,429	34,623	3,990	93,007
22 Periyakulam	45,546	— 8,180	4,831	97,878
23 Rameswaram (Panchayat Board) ..	5,199	2,443	1,498	34,511
24 Sembiem				[*See* Note
25 Sivakasi	56,298	5	5,941	1,11,309
26 Tiruvallur				[*See* Note
27 Tiruppur	1,61,194	73,650	9,964	3,02,537
28 Tanjore	2,48,536	1,22,317	19,034	5,12,848
29 Tiruvottiyur	45,631	— 5,651	1,653	83,356
30 Tiruppattur (North Arcot)	50,032	— 13,809	5,965	1,32,643
31 Tiruvannamalai	60,137	— 4,308	8,194	1,53,080
32 Udamalpet	60,152	..	5,846	1,31,911
33 Virudunagar	1,38,993	30,581	10,508	2,58,727
34 Villivakkam				[*See* Note
35 Wellington Cantonment				Figures not

Notes.—(1) All figures are calculated on a uniform
(2) Total expenditure including loan
(3) Excluding charges for service
(4) Figures will be furnished later on

Koviloor Acadamy

F-2—*cont.*

records—Local authorities—cont

Population of area of supply.	Total capacity.	Maximum load on the feeders.	Units generated.	Units purchased.	Load factor.	Total number of units sold.	Total number of consumers at the end of the year.	Serial number.
(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	
			RS.	RS.	PER CENT.			
Please *see* column 26 of the statistical data.	230 KW	120 KVA	..	2,08,968	16·90	178,220	301	1
..	125 KW	110 KW	1,79,744	..	16·00	154,221	431	2
..	543 KW	315 KW	7,22,545	..	17·05	470,538	1,001	3
..	1,325 KVA	908 KW	..	33,47,278	36·9	2,946,528	2,570	4
(4) below]								5
(4) below]								6
..	450 KVA	330 KW	..	10,38,372	30·99	898,420	1,112	7
..	530 KVA	424 KVA	..	12,64,432	30·44	1,133,539	2,006	8
..	450 KVA	300 KW	..	7,66,641	51·28	675,616	1,028	9
(4) below]								10
(4) below]								11
..	60 KW	4,152 KW	79,223	..	19·17	70,727	270	12
..	140 KW	65 KW	1,12,276	..	17·75	101,347	412	13
..	425 KVA	240 KW	..	7,11,930	30·23	635,630	1,000	14
..	175 KVA	132 KW	..	1,91,090	15·36	178,131	448	15
(4) below]								16
..	3,650 KVA	2,610 KW	..	88,21,497	35·00	8,053,400	6,814	17
..	250 KVA	225 KW	..	6,58,983	29·20	575,553	1,003	18
..	1,125 KVA	1,070 KVA	..	27,35,953	25·60	2,403,054	1,762	19
(4) below]								20
..	250 KVA	212 KW	..	5,20,005	24·94	464,377	680	21
..	200 KVA	120 KVA	..	3,31,216	28·09	296,139	598	22
..	..	20 KW	..	12,069	6·78	11,912	112	23
(4) below]								24
..	250 KVA	154 KW	..	4,61,816	31·56	426,891	672	25
(4) below]								26
..	1,125 KVA	480 KW	..	15,55,130	32·23	1,358,851	1,368	27
..	1,075 KVA	705 KW	..	23,09,995	33·70	2,036,524	2,204	28
..	300 KVA	228 KVA	..	5,22,227	22·07	441,858	172	29
..	175 KVA	148 KW	..	3,43,384	23·95	310,450	841	30
..	225 KVA	214 KW	..	5,42,387	25·96	486,679	663	31
..	275 KVA	150 KW	..	5,10,028	34·01	448,115	609	32
..	475 KVA	375 KVA	..	12,35,540	32·45	1,101,380	1,768	33
(4) below]								34

available.—Exempted by Government from submitting the accounts in the prescribed form. 35

basis according to the standard practice.
charges but less service connexion.
connexion as given on the Debtor side in No. III Revenue Account.
receipt of audited statement of accounts for 1947–48.

Koviloor Acadamy

APPENDIX

Statistical data for the administration report for the

Serial number and name of licensee.	Number of units generated.	Number of units purchased.	Number of units sold.	Maximum demand in K.W.
(1)	(2)	(3)	(4)	(5)
1 Adoni	253,976	..	192,185	158
2 Anakapalle	..	404,630	338,754	154
3 Ambur-Vaniyambadi	..	1,942,703	1,596,215	715
4 British Cochin	..	247,242	199,563	85
5 Bobbili	..	338,539	283,950	126
6 Kozhikode	..	4,135,518	3,033,741	1,175
7 Chittoor	..	813,739	702,222	216
8 Cuddapah	Taken over by Government on 18th November 1948).			
9 Chingleput	1,099,982	..	999,718	247
10 Cannanore-Tellicherry	..	2,690,168	2,493,606	960
11 Chicacole	193,721	..	155,824	102
12 Devakottai	..	8,421,020	584,054	300
13 East Tanjore	..	10,857,289	8,583,086	2,835 Tiruvarur. 131 Vallam. 98 Arantangi.
14 East Ramnad	..	6,146,975	5,367,026	1,580 Sivaganga. 73 Singampuneri.
15 East Coast	Supply has not yet been started.			
16 Eluru	..	825,509	729,964	244
17 Guntur	..	3,775,219	3,106,179	950 K.V.A. Tenali. 52 Sithanagaram.
18 Gudiyattam	..	3,672,666	3,234,408	1,000
19 Gudivada	..	274,094	253,818	110
20 Kanadukathan	..	1,538,666	1,202,469	489
21 Kumbakonam	..	4,507,620	3,443,016	1,310
22 Karaikudi*				
23 Mangalore	2,394,400	..	2,013,849	805 K.V.A.
24 Nellore	719,807	..	589,996	284
25 Nagapattinam	..	3,295,827	3,159,974	1,140
26 Nattarasankottai	..	387,592	318,778	122
27 Narasaraopet	201,816	..	195,136	96
28 Nelkuppai*	..	..	..	..
29 Okkur*	..	..	..	..
30 Ongole*	..	..	..	..
31 Ponnani	Supply has not yet been started.			
32 Palghat*	..	..	..	..
33 Proddatur*	..	..	..	..
34 Rajahmundry	1,117,054	..	965,618	345
35 Salem-Erode	..	13,695,480	12,133,271	2,240 Salem. 791 Erode. 520 Sankaridrug. 14 Pallipalayam.
36 South Arcot	..	18,573,881	14,068,892	3,569
37 Salur Parvatipur	21,609 (Parvathipur)	98,140 (Salur)	94,680	66
38 Srivilliputtur	..	4,511,720	4,254,757	695
39 Tiruchirappalli-Srirangam	..	30,254,831	27,473,715	5,800 Tiruchirappili. 165 Mayanoor.
40 Tirunelveli-Tuticorin*				
41 Tirumalai-Tirupathi*				
42 Udipi	282,146	..	235,078	146
43 Vellore	..	4,229,985	3,731,731	1,220
44 Visakhapatnam	..	2,796,856	2,402,442	862·75 K.V.A.
45 Valparai	Taken over by Government on 1st July 1948.			

Koviloor Acadamy

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year ending 31*st March* 1949 (*Company licensees*).

Total connected load at the end of 1948–49 in K.W.

Municipal.	Industrial.					Railways.	Serial number.
	Textiles.	Cement.	Chemicals.	Steel rolling mills.	Small Industries.		
(6)	(7)	(8)	(9)	(10)	(11)	(12)	
17	..	..	..	..	118	..	1
13	..	..	..	.	188	..	2
32	..	..	..	..	691	..	3
16	..	..	..	..	36	..	4
..	..	..	..	..	325	..	5
43	..	..	..	..	1,401	55	6
21	..	..	..	..	481	2	7
							8
25	..	..	..	..	301	20	9
38	923	..	..	..	735	..	10
13	..	..	..	..	79	..	11
58	..	..	..	..	195	..	12
62	..	..	..	..	4,776	72	13
..	..	..	..	..	959	20	14
							15
83	..	..	2	..	245	..	16
11	300	80	..	..	981	20	17
23	455	..	..	..	759	..	18
18	..	..	..	..	93	..	19
..	..	..	..	..	370	..	20
62	..	..	..	..	1,953	26	21
							22
63	..	..	..	..	1,696	11	23
100	..	..	..	..	103	82	24
36	..	..	..	2,408	678	14	25
..	..	..	..	..	159	10	26
17	..	..	..	..	103	2	27
..	..	..	..	..	..	..	28
..	..	..	..	..	..	..	29
..	..	..	..	..	..	..	30
							31
..	..	..	..	..	..	..	32
..	..	..	..	..	..	..	33
126	..	..	..	..	226	31	34
110	1,732	..	..	388	5,026	37	35
55	..	..	..	..	2,034	126	36
..	..	..	..	..	21	..	37
58	924	..	..	..	998	..	38
502	1,266	2,270	..	..	4,205	207	39
..	..	..	..	..	..	..	40
..	..	..	..	..	..	..	41
10	..	..	..	..	105	..	42
84	..	..	281	..	1,079	24	43
39·8	..	..	..	..	506	..	44
							45

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APPENDIX

Statistical data for the administration report for the

Serial number and name of licensee.	Total connected load at the end of 1948-49			
	Government department.	Panchayat boards.	Agricultural.	Domestic lighting and power.
	(13)	(14)	(15)	(16)
1 Adoni	4	..	..	168
2 Anakapalle	2	..	8	263
3 Ambur-Vaniyambadi	1	..	470	717
4 British Cochin	10	..	..	294
5 Bobbili	1	4	9	136
6 Kozhikode	..	..	2	1,431
7 Chittoor	8	..	140	765
8 Cuddapah				Taken over by Government
9 Chingleput	36	..	223	228
10 Cannanore-Tellicherry	..	..	..	831
11 Chicacole	7	3	4	301
12 Devakottai	2	..	29	1,039
13 East Tanjore	27	73	223	2,874
14 East Ramnad	3	48	65	1,370
15 East Coast				Supply has not yet
16 Eluru	10	..	23	524
17 Guntur	28	0·275	356	1,060
18 Gudiyattam	..	4	1,169	679
19 Gudivada	1	..	16	180
20 Kanadukathan	3	32	24	1,759
21 Kumbakonam	21	45	39	1,713
22 Karaikudi*	..	..	..	..
23 Mangalore	71	..	5	1,258
24 Nellore	30	..	4	155
25 Nagapattinam	20	5	..	1,357
26 Nattarasankottai	6	15	4	384
27 Narasaraopet	3	..	2	72
28 Nelkuppai*	..	..	..	..
29 Okkur*	..	..	..	..
30 Ongole*	..	..	..	..
31 Ponnani				Supply has not yet
32 Palghat*	..	..	..	..
33 Proddatur*	..	..	..	..
34 Rajahmundry	105	4	5	356
35 Salem-Erode	49	19	508	3,036
36 South Arcot	43	28	543	1,863
37 Salur-Parvatipur	0·2	7	..	104
38 Srivilliputtur	2	..	203	713
39 Tiruchirappalli-Srirangam ..	54	46	832	5,857
40 Tirunelveli-Tuticorin*	..	..	..	..
41 Tirumalai-Tirupathi*	..	..	..	..
42 Udipi	..	2	..	190
43 Vellore	89	49	202	1,756
44 Visakhapatnam	573	..	..	1170.2
45 Valparai				Taken over by Government

Note.—All the above figures are as furnished
* Particulars will be furnished later

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F-3—*cont.*

***year ending* 31*st March* 1949 (*Company licensees*)—cont.**

Miscellaneous.	Total.	Number of high-tension and low-tension consumers as on 31st March 1949.		Number of agricultural pump sets and total horse-power.				Population of area of supply.	Serial number.
				As on 31st March 1949.		Connected during the year 1948–49.			
		High-tension.	Low-tension.	Number.	Horse-power.	Number.	Horse-power.		
(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	
3	310	..	505	..	..	..	..	40,000	1
..	474	..	575	2	10	1	5	40,000 (Approximately).	2
30	1,941	..	1,889	110	631	35	208	65,000	3
..	356	..	335	..	..	..	..	34,000	4
4	479	..	318	2	10	1	8	14,469	5
..	2,932	..	3,548	3	5	..	..	160,000	6
16	1,433	..	1,315	29	152	9	51	50,000	7
on 18th November 1948.									8
30	863	..	759	58	303	25	128	30,000	9
..	2,527	3	2,380	..	..	..	..	1,25,000	10
29	436	..	460	2	8	..	..	30,300	11
5	1,328	..	1,309	11	39	1	3	About 30,000	12
1,979	10,086	4	10,152	69	297	13	47	1,611,162 Licensees area. 371,051 Actually served.	13
5,631	8,096	4	3,707	14	88	3	11	207,243 Licensees area. 118,322 Actually served.	14
been started.									15
..	887	..	1,423	4	29	..	..	75,000	16
70	2,895·275	2	3,051	109	474	18	76	About 300,000	17
1	3,090	1	2,249	241	1,278	119	694	95,000	18
28	336	..	619	4	20	1	5	24,000	19
677	2,865	2	1,829	10	32	1	5	53,086 (As per 1941 census).	20
..	3,859	..	6,557	13	52	5	19	150,000	21
..	..	..	..	..	..	..	..	..	22
172	3,276	..	2,861	1	5	..	..	99,060 (As per last census).	23
114	588	..	1,067	1	5	..	..	62,000	24
20	4,538	1	2,366	..	..	..	..	55,000	25
10	588	..	930	1	5	..	..	25,000	26
19	218	..	803	1	3	..	..	20,000	27
..	..	..	..	..	..	..	..	..	28
..	..	..	..	..	..	..	..	..	29
..	..	..	..	..	..	..	..	..	30
been started.									31
..	..	..	..	..	..	..	..	..	32
..	..	..	..	..	..	..	..	..	33
63	916	1	1,201	2	6	..	..	102,000	34
0·44	10,006·44	7	7,090	90	503	17	105	224,272	35
..	9,192	4	6,042	1,134	5,766	194	1,080	180,000	36
15	147·2	..	406	..	..	..	..	40,100	37
..	2,893	5	2,809	57	272	38	192	About 100,000	38
3,147	18,386	9	14,009	222	1,109	40	217	1,796,703 (Licensees area). 485,481 (Actually served).	39
..	..	..	..	..	..	..	..	..	40
..	..	..	..	..	..	..	..	..	41
8	315	1	738	..	..	..	..	26,000	42
5	4,169	..	5,563	55	247	26	117	126,950 (As per 1941 census).	43
55·0	2344·0	3	2,037	..	..	..	..	250,000	44
on 1st July 1948.									45

by the concerned licensees themselves.
on their receipt from the concerned licensees.

APPENDIX F-4.

Statistical data for the Administration Report for the year ending 31st March 1949 (Local authorities).

Serial number and name of licensee.	Number of units generated.	Number of units purchased.	Number of units sold.	Maximum demand in K.W.	Total connected load at the end of 1948-49.						
						Industrial.					
					Municipal.	Textiles.	Cement.	Chemical.	Steel rolling mills.	Small industries.	Railways.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
					K.W.	K.W.	K.W.	K.W.	K.W.	K.W.	K.W.
1 Alandur	..	2,93,158	2,48,951	156 K.V.A.	..	..	..	..	..	201	..
2 Anantapur	2,29,600	..	2,00,139	84	11	..	..	..	..	84	..
3 Bellary *	..	..	..	..	..	..	..	..	..	..	..
4 Vijayawada	..	38,99,682	33,07,812	1,000	215·606	..	..	..	..	54,402	215·5
5 Bodinayakkanur	..	3,93,840	3,49,975	135 K.V.A.	34	..	..	..	..	109	..
6 Coimbatore	..	67,49,086	51,89,348	2,325	236	17	..	..	..	1,776	50
7 Kakinada	..	12,16,714	10,66,610	385	124	24	..	..	..	355	11
8 Kancheepuram	..	17,81,756	15,69,220	497	138	..	..	..	..	583	..
9 Coonoor	..	8,93,000	8,01,007	325	5	..	..	..	..	188	13
10 Dindigul *	..	..	..	..	..	..	..	..	..	..	..
11 Dharapuram	..	4,38,961	3,99,257	144 K.V.A.	30	..	..	..	..	154	..
12 Hindupur	96,375	..	86,341	46·8	15	..	..	..	..	246	..
13 Hospet	1,19,895	..	1,08,410	73	11	..	..	..	..	60	2
14 Karur	..	8,70,240	7,87,496	335	..	..	..	..	..	301	6
15 Kodaikanal	..	2,31,014	1,84,674	159	25	..	..	..	..	53	..
16 Kollegal	..	..	..	..	Taken over by Government on 1st October 1948.	..	..	..	..	..	..
17 Mathurai *	..	..	..	..	..	..	..	..	..	..	..
18 Masulipatnam	..	7,51,027	6,58,273	235	85	..	..	..	..	263	..
19 Ootacamund	..	31,37,010	27,32,044	1,200	79	..	..	..	..	..	8
20 Pollachi	..	18,14,395	15,69,481	515	6	..	..	..	..	1,044	11
21 Palni	..	6,50,697	5,68,577	216	18	..	..	..	..	234	5
22 Periyakulam	..	4,05,324	3,67,514	130 K.V.A.	27	..	..	..	..	149	..
23 Rameswaram Devastanam *	..	..	..	..	..	..	..	..	..	..	..
24 Sembiam	..	5,35,714	4,36,271	176	37	..	..	..	..	187	..
25 Sivakasi	..	5,33,318	4,71,350	153	21	..	..	..	..	198	..
26 Tiruvallur	..	5,17,868	4,49,524	136	14	..	..	..	..	120	..
27 Tiruppur	..	14,38,030	12,09,506	495	58·118	770·298	..	48·490	35·425	381·135	3·755
28 Tanjore	..	26,80,460	24,16,540	665	216	..	..	..	..	974	30
29 Tiruvottiyur *	..	..	..	..	..	..	..	..	..	..	..
30 Tiruppattur (N.A.) ..	..	4,73,544	4,34,197	164	14	..	..	..	..	176	..
31 Tiruvannamalai	..	6,80,937	5,83,455	234	26	..	..	..	..	139	10
32 Udamalpet	..	6,05,054	5,27,081	162	14	..	..	..	..	272	6
33 Virudhunagar	..	13,44,310	12,17,300	430	66·09	..	..	..	..	636·005	..
34 Villivakkam	..	1,12,962	95,870	67 K.V.A.	7	..	..	..	..	30	..
35 Wellington Cantonment ..	..	1,47,883	1,37,247	65	3085	..	..	..	..	33	..
36 Rameswaram Panchayat Board.	..	16,784	16,526	20	..	..	..	..	..	..	..

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	Total connected load at the end of 1947-48—*cont.*						Number of H.T. and L.T. consumers as on 31st March 1949.		Number of agricultural pump sets and total h.p.				Population of area of supply.
	Government departments.	Panchayat boards.	Agricultural.	Domestic lighting and power.	Miscellaneous.	Total.	H.T.	L.T.	As on 31st March 1949.		Connected during the year.		
	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)
	K.W.	K.W.	K.W.	K.W.	K.W.	K.W.			NO.	H.P.	NO.	H.P.	
1 Alandur	..	..	2	167	23	393	..	351	1	3	1	3	13,213 †
2 Anantapur	..	..	16	112	35	259	..	450	8	22	2	8	21,482
3 Bellary *	..	..	..	..	..	..	..	..	..	..	..	..	..
4 Vijayawada	38,508	..	59·870	770·850	793·61	2,148·346	1	2,503	15	80·25	..	..	1,50,000
5 Bodinayakkanur	0·335	..	37	178	6	364·335	..	625	8	45	..	..	40,000
6 Coimbatore	311	..	482	4,130	43	7,045	1	7,606	98	643	11	65	1,30,354 †
7 Kakinada	14	..	4	597	53	1,182	..	1,554	3	3	..	..	75,146
8 Kancheepuram	..	..	184	1,198	5	2,108	..	2,672	42	247	8	59	1,00,000
9 Coonoor	..	..	..	551	51	808	..	1,184	..	..	..	..	18,781
10 Dindigul *	..	..	..	..	..	..	..	..	..	..	..	..	..
11 Dharapuram	..	..	34	..	..	218	..	789	9	46	1	8	20,660
12 Hindupur	..	..	..	110	..	371	..	277	..	..	..	..	18,978 ‡
13 Hospet	13	..	18	106	5	215	..	423	8	3	..	..	26,013 †
14 Karur	9	..	7	670	44	1,037	..	1,281	2	7	1	3	27,575 †
15 Kodaikanal	14	..	..	444	..	536	..	566	..	..	..	..	9,124
16 Kollegal	..	..	..	..	..	..	..	..	..	..	..	..	..
17 Mathurai *	..	..	..	..	..	..	..	..	..	..	..	..	..
18 Masulipatnam	..	..	..	743	..	1,091	..	1,206	..	..	..	..	59,110
19 Ootacamund	84	153	12	3,809	..	4,144	3	2,052	3	17	1	8	29,989 †
20 Pollachi	13	..	129	490	51	1,744	..	1,262	32	174	9	41	26,198 ‡
21 Palni	4	..	14	400	..	675	..	766	4	19	..	..	24,706 †
22 Periyakulam	..	..	27	305	4	512	..	772	7	35	1	5	25,882 ‡
23 Rameswaram Devasthanam *	..	..	..	..	..	..	..	..	..	..	..	..	..
24 Sembiam	1	..	27	183	..	435	..	560	12	37	2	10	35,579
25 Sivakasi	..	..	45	411	..	675	..	977	12	61	..	5	16,627 †
26 Trivallur	..	..	142	232	12	520	..	478	28	170	9	56	13,183 †
27 Tiruppur	8·110	..	104·028	765·544	14·92	2,189·823	Nil	1,654	31	131	7	33	38,099
28 Tanjore	96	..	64	513	88	1,981	2	2,635	21	82	2	15	68,722
29 Tiruvottiyur *	..	..	..	..	..	..	..	..	..	..	..	..	..
30 Tirupattur (N.A.)	3	..	27	359	..	579	..	988	6	36	..	10	22,187 †
31 Tiruvannamalai	1	..	64	354	38	631	..	924	21	84	6	26	33,575
32 Udamalpet	8	3	144	345	23	815	..	716	26	190	2	15	17,596 ‡
33 Virudhunagar	6·989	..	40·484	1,028·127	..	1,777·697	..	2,293	10	40·184	3	15	34,560
34 Villivakkam	..	..	..	1,000	200	1,237	..	200	..	..	..	..	8,871 ‡
35 Wellington Cantonment	..		..	66	37	3,221	..	154	..	..	..	..	8,225
36 Rameswaram Panchayat Board.	..	4	..	16	..	20	..	118	..	..	..	..	5,778

Note.—All the above figures are as furnished by the concerned licensees.

* Particulars will be furnished later on their receipt from the licensees. † As per 1941 census. ‡ As per last census.

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APPENDIX G-I.

List of H.T. consumers supplied directly by the Electricity department—Pykara System.

Serial number, name of the consumer and name of the place.

H. T. Textile Mills. Industries (Textiles).

1 Coimbatore Spinning and Weaving Mills, Coimbatore.
2 Vasantha Mills, Coimbatore.
3 Cambodia Mills, Coimbatore.
4 Rajalakshmi Mills, Coimbatore.
5 Somasundara Mills, Coimbatore.
6 Dhanalakshmi Mills, Tiruppur.
7 Kaleeswarar Mills, Coimbatore.
8 Rangavilas Mills, Coimbatore.
9 Pankaja Mills, Coimbatore.
10 Lakshmi Mills, Coimbatore.
11 Ramalinga Choodambigai Mills, Tiruppur.
12 Coimbatore Cotton Mills, Coimbatore.
13 Sarada Mills, Coimbatore.
14 Lotus Mills, Coimbatore.
15 Palani Andavar Mills, Udamalpet.
16 Janardhana Mills, Coimbatore.
17 Palamalai Ranganathar Mills, Coimbatore.
18 Venkatesa Mills, Udamalpet.
19 Murugan Mills, Coimbatore.
20 Saroja Mills, Coimbatore.
21 Pioneer Mills, Coimbatore.
22 Radhakrishna Mills, Coimbatore.
23 Gnanambigai Mills, Coimbatore.
24 Vijayalakshmi Mills, Coimbatore.
25 Kamala Mills, Coimbatore.
26 Tirumurthi Mills, Udamalpet.
27 Buckingham and Carnatic Mills, Tiruppur.
28 Balasubramania Mills, Coimbatore.
29 Soundararaja Mills, Dindigul.
30 Kothari Textiles, Coimbatore.
31 Asher Textiles, Tiruppur.
32 Kasthuri Mills, Coimbatore.
33 Kumaran Mills, Coimbatore.
34 Jayalakshmi Mills, Coimbatore.
35 Vinodha Ginning Factory, Dindigul.
36 Rathna Gin and Cotton Factory, Dindigul.
37 Karthikeya Mills, Coimbatore.

Special loads.

1 Coimbatore Cement Works, Coimbatore.
2 Devala Mines, Nilgiris (Nilambur).
3 Cordite Factory, Nilgiris (Aravankadu).
4 General Manufacturing Corporation, Coimbatore.
5 Brooke Bond Tea Company, Limited, Coimbatore.
6 Barath Oil Mills, Limited, Pollachi.
7 C. Ramaswami and Company Oil Mills, Coimbatore.
8 Argus Engineering Company, Peelamedu.
9 Coimbatore Oil Mills, Coimbatore.
10 Radhakrishna Mills (Pollachi), Limited, Pollachi.
11 K. M. M. Kadhar Mohideen Rowther and Sons, Dindigul.
12 Tex Tool Company, Ganapathy (Coimbatore).
13 Ambarampalayam Water Works, Pollachi.

Licensees.

1 Palghat Electric Supply Corporation, Palghat.
2 Cochin Government, Chittur (Cochin).
3 West Coast Electricity Supply Corporation, Limited, supply at Calicut.
4 West Coast Electricity Supply Corporation, Limited, Supply at Cannanore—Tellicherry.
5 Porinzalakuthu Scheme, Cochin Government.

Municipalities.

1 Coimbatore Municipality.
2 Pollachi Municipality.
3 Tiruppur Municipality.
4 Udamalpet Municipality.

Serial number, name of the consumer and name of the place.

Municipalities—cont.

5 Ootacamund Municipality.
6 Palni Municipality.
7 Dharapuram Municipality.
8 Dindigul Municipality.
9 Periakulam Municipality.
10 Bodinaikkanur Municipality.
11 Kodaikanal Municipality.

Government departments.

1 Central Jail, Coimbatore.
2 Agricultural College, Coimbatore.
3 Forest College, Coimbatore.
4 Sugarcane Station, Coimbatore.
5 Malt Factory, Coimbatore.
6 Superintending Engineer, Moyar, construction works at Moyar and Masinagudi, Pykara III stage extension.

Military Engineering services.

1 Sulur Aerodrome, Sulur (Coimbatore).
2 Naval Air Station, Coimbatore.
3 First point of supply, military buildings and workshops.

Tea Estates, Anamalais.

1 Vellamalai Estates.
2 Pachemalai Estates.
3 Akkamalai Estates.
4 Monica Estates.
5 Kallayar Estate.
6 Iyerpadi Estate.
7 Uralikkal Estates.
8 Sheikalmudi Estates.
9 Injiparai Estates.
10 Stanmore Estates.
11 Nallakattu Estates.
12 Srikundra Estates.
13 High Forest Estates.
14 Karamali Estate.
15 Kadalaparai Estate.
16 Sellaparai Estate.
17 Mount Stuart Estate.
18 Malakiparai Estate.
19 Thaimudi Estates.
20 Anamalley Ropeway Company, Limited, Attakatti.
21 Sholayar Estate, Anamalais.
22 Naduvar Estate, Anamalais.

Tea Estates, Nilgiris.

1 Bengoram Estates.
2 Devarshola Estates.
3 Glendale Estates.
4 Parkside Estates.
5 Nonsuch Estates.
6 Prospect Estates.
7 Terrace Estates.
8 Kilkotagiri Estate.
9 Thuttapallam Estates.
10 Rousedenmullai Estates.
11 Kilmalfort Estates.
12 Dunsandle Estates.
13 The Terramia Estate.
14 Thiashola Estate.
15 Sussex Group Estates.
16 Sutton Estates.
17 Farm Tea Estates.
18 Mailoor Estates.

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Appendix G-2.

List of H.T. consumers supplied directly by the Electricity department—Mettur System—1948-49.

INDUSTRIES.

(*a*) *Textiles.*

1 Mettur Industries, Ltd.

(*b*) *Chemicals.*

2 Mettur Chemical and Industrial Corporation, Ltd., Mettur Dam.

(*c*) *Others.*

3 Indian Metal and Metallurgical Corporation, Ltd., Mettur Dam.
4 The Deccan Sugar and Abkari Co., Ltd.
5 Dhanalakshmi Mills, Ltd., Pugalur.
6 Erode Water Works.
7 Neivelli Mines.

LICENSEES.

8 Vellore Electric Supply Corporation, Ltd., Vellore.
9 Vellore Electric Supply Corporation, Ltd., Ranipet.
10 North Arcot District Electric Supply Corporation, Pernambut.
11 North Arcot District Electric Supply Corporation, Gudiyattam.
12 Chittoor Electric Supply Corporation, Ltd., Chittoor.
13 Carnatic Electric Supply Corporation, Ltd., Ambur.
14 Salem-Erode Electricity Distribution Co., Ltd., Salem.
15 Salem-Erode Electricity Distribution Co., Ltd., Erode I Point.
16 Salem-Erode Electricity Distribution Co., Ltd., Sankari.
17 Salem-Erode Electricity Distribution Co., Ltd., Erode II Point.
18 Salem-Erode Electricity Distribution Co., Ltd., Pallipalayam.
19 Salem-Erode Electricity Distribution Co., Ltd., Erode Railway Station.

LICENSEES—*cont.*

20 South Madras Electric Supply Corporation, Ltd., Tiruchirappalli
21 South Madras Electric Supply Corporation, Ltd., Tiruvarur.
22 South Madras Electric Supply Corporation, Ltd., Mayanoor.
23 South Madras Electric Supply Corporation, Ltd., Vallam.
24 Negapatam Electric Supply Corporation, Ltd., Nagapattinam.
25 Kumbakonam Electric Supply Corporation, Ltd., Kumbakonam.
26 South Arcot Electric Supply Corporation, Ltd., Villupuram.
27 Chingleput Electric Supply Corporation, Ltd., Chingleput.
28 Chingleput Electric Supply Corporation, Ltd., Reddipalayam.
29 Chingleput Electric Supply Corporation, Ltd., Villlampakkam (Pole 341).
30 Tirumalai-Tirupati Devasthanam, Tirupati.
31 Tanjore Municipality.
32 Karur Municipality.
33 Tirupattur Municipality.
34 Kancheepuram Municipality.
35 Tiruvannamalai Municipality.
36 Tiruvallur Panchayat Board.

OTHERS.

37 French India Government, Pondicherry.
38 South Indian Railway at Tiruchirappalli.
39 South Indian Railway at Erode.
40 M. & S. M. Railway at Arkonam.
41 M. & S. M. Railway at Jalarpet.
42 Executive Engineer, P.W.D., Salem Division, Mettur Dam.

Appendix G-3.

List of H.T. consumers supplied directly by the Electricity department—Papanasam System.

INDUSTRIES.

(*a*) *Textiles.*

1 Meenakshi Mills, Ltd., Mathurai.
2 Pandian Mills, Mathurai.
3 The Loyal Textile Mills, Koilpatti.
4 The Mahalakshmi Mills, Pasumalai.
5 Kothandaram Mills, Mathurai.
6 Lakshmi Mills, Koilpatti.
7 The Mathurai Mills Co., Ltd., Mathurai (Dunlop Yarn Plant).
8 Rajah Mills, Mathurai.
9 Harvey Mills, Ambasamudram.
10 Mathurai Mills, Virudhunagar.

(*b*) *Oil Mills.*

11 A. T. Parangiri Nadar & Co., Virudhunagar.
12 T. M. M. Madalai Nadar & Co., Virudhunagar.
13 T. M. S. Madalai Nadar & Co., Virudhunagar.
14 Southern Oil Mills, Virudhunagar.
15 K.C.A.S. Durairaj Nadar and Sons, Sivakasi.
16 Orient Products, Tirumangalam.
17 M. S. Paramasiva Nadar Oil Mills, Virudhunagar.

INDUSTRIES—*cont.*

(*c*) *Cement works.*

18 India Cements, Ltd, Talaiyuthu.

LICENSEES.

19 Madura Municipality, Mathurai.
20 Virudhunagar Municipality, Virudhunagar.
21 Sivakasi Municipality, Sivakasi.
22 South Madras Electric Supply Corporation, East Ramnad.
23 West Ramnad Electric Distribution Co., Ltd., Rajapalayam.
24 Nattarasankottai Electric Supply Corporation, Nattarasankottai.
25 Reliance Electric Supply Corporation, Okkur.
26 Tirunelveli-Tuticorin Electric Supply Corporation, Tuticorin.

OTHERS.

27 Government of Travancore.
28 Shencottah Electric Supply Co. (licensee of Travancore State).
29 Virudhunagar Municipality Waterworks.

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APPENDIX G-4.

List of H.T. consumers supplied directly by the Electricity department—Madras System.

1 Buckingham and Carnatic Mills.
2 Madras and Southern Mahratta Railway.
3 South Indian Railway—Main Supply, Egmore.
4 Do. Emergency Supply, Beach.
5 Gordon Woodroffe Leather Manufacturing, Ltd., Pallavaram.
6 Government Medical Stores, Periamet.
7 Government Press, Mint Street.
8 City Ice Factory, General Patters Road.
9 Kasturi and Sons, Ltd. (Hindu), Mount Road.
10 Madras Christian College, Tambaram.
11 Madras Port Trust.
12 Madras Race Club, Guindy.
13 Massey and Co., Ltd., Rayapuram.
14 Alandur Panchayat Board.
15 Sembium Supply.
16 Tiruvottiyur Panchayat Board.
17 Villivakkam Panchayat Board.
18 Richardson and Cruddas, Kasimode Works, Rayapuram.
19 Spencer and Co., Ltd., Mount Road.
20 South Indian Royal Ice Factory, Egmore.
21 Theosophical Society, Adyar.
22 Wireless Station, Fort St. George.
23 Madras Electric Tramways (1904), Ltd.
24 Corporation of Madras (Kilpauk Pumping Station).
25 Do. Street Lighting.
26 Engineering College, Guindy.
27 Mysore Vegetable Oil Products, Ltd., Cochrane Basin Road.
28 R.N.A.S., Tambaram.
29 Government Broadcasting Station, Guindy.
30 The Indian Oxygen and Acetylene Co., Ltd., Tondiarpet.
31 The Hindustan Metal Refinery Rolling Mills, 51, Gollawar Agraharam St., Tondiarpet.

APPENDIX G-5.

List of H.T. consumers supplied directly by the Andhra Power System.

VISAKHAPATNAM AREA.

Industries.

1 Scindia Steam Navigation and Company.
2 Garbham Kodur Mines, Ltd.
3 B. Paldanna and Sons (Oil Mills).
4 N. Viswanathan (Oil Mills).
5 Chittivalasa Jute Mills.
6 M. Seetharamayya and Sons.
7 Visakhapatnam Sugar and Refineries.
8 The Visakhapatnam Vegetable and Oil Products, Ltd., Seethanagaram.

Licensees.

1 Visakhapatnam Electric Supply Corporation, Ltd.—Town Supply.
2 Visakhapatnam Electric Supply Corporation—Aerodrome Supply.
3 Visakhapatnam Electric Supply Corporation—Malkapuram Supply.
4 Anakapalle Electric Supply Corporation.
5 Motors and General Stores, Ltd., Bobbili.
6 Salur-Parvathipur Electric Supply Corporation.

Others.

1 Visakhapatnam Port.
2 Royal Navy.
3 P. Bhaskara Rao.
4 P. Lakshmana Swami.

VIJAYAVADA AREA.

Industries.

1 Andhra Cement Company.
2 K.C.P., Ltd., Vuyyur.
3 National Chemical Works.
4 Vijyavavada Municipality.
5 Masulipatam Municipality.
6 Gudivada Electric Supply Corporation, Ltd.
7 Ellore Electric Supply Corporation, Ltd.
8 Guntur Power and Light, Ltd.—Tenali Supply.
9 Guntur Power and Light, Ltd.—Tadepalli Supply.

KAKINADA AREA.

1 Kakinada Municipality.

KURNOOL AREA.

Nil.

APPENDIX G-6.

List of textile mills and other H.T. consumers, their connected load and maximum demand during 1948–49 *in Electric licensees' areas.*

Serial number and name of electric licensee.	Textile mills.	Other H.T. consumers.	Connected load.	Maximum demand.
(1)	(2)	(3)	(4)	(5)
1 Nagapatinam.	....	The Indian Steel Rolling Mills, Nagapattinam.	2,408 K.W.	902 K.W.
2 Tanjore ..	....	(1) Railway	30 „	20 K.V.A.
		(2) Water Works Pumping Station.	104 „	53 „
3 Cannanore-Tellicherry.	(1) The Aaron Spinning and Weaving Mills, Ltd., (*) Pappinesseri.	....	538 „ (*)	294 K.W.
		....	385 „ (*)	264 „
	(2) The Cannanore Spinning and Weaving Mills, Ltd., (*) Cannanore.	(1) Western India Plywood, Ltd.	415 „	96 „

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APPENDIX G-6—*cont.*

List of textile mills and other H.T. consumers, their connected load and maximum demand during 1948–49 *in Electric licensees' areas*—cont.

Serial number and name of electric licensee.	Textile mills.	Other H.T. consumers.	Connected load.	Maximum demand.
(1)	(2)	(3)	(4)	(5)
4 South Arcot Electricity Distribution Co., Ltd.	....	(1) Annamalai University ..	318 K.W.	200 K.V.A.
		(2) Messrs. Rallis, India, Ltd.	141 ,,	100 ,,
		(3) East India Distilleries and Sugar Factories, Ltd.	190 ,,	120 ,,
		(4) Messrs. Coromandel Vegetable Oil Industries, Ltd.	39 ,,	35 ,,
5 Tiruchirappalli-Srirangam.	(1) The Tiruchirappalli Mills, Ltd., Tiruchirappalli.	....	676 ,,	390 ,,
	(2) Sri Meenakshi Mills, Ltd., Usilampatti.	....	465 ,,	430 ,,
	(3) Cauvery Spinning and Weaving Mills, Ltd., Vallanur.	....	125 ,,	135 ,,
		(1) Dalmia Cement, Ltd., Dalmiapuram.	2,270 ,,	1,430 ,,
		(2) The Pudukottai Electric Supply Corporation, Ltd., Pudukottai.	1,256 ,,	473 ,,
		(3) The Ponnamavaravathy Electric Supply Corporation, Ltd., Ponnamavaravathy.	1,453 ,,	355 ,,
		(4) The All-India Radio, Tiruchirappalli for Broadcasting Station at Tiruverumbur.	30 ,,	31 K.W.
		(5) Dalmia Cement, Ltd. (for pumping set at Alagundy).	23 ,,	20 ,,
		(6) The Mettur Chemical and Industrial Corporation, Ltd. (V.G. Plant, Edamalaiputtur).	415 ,,	150 K.V.A.
6 East Tanjore	....	(1) The South Arcot Electricity Distribution Co., Ltd.	1,284 ,,	320 K.W.
		(2) Karikkal Electric Supply Corporation, Limited.	557 ,,	181 ,,
		(3) Do.	36 ,,	29 ,,
		(4) The Chief Mechanical Engineer, South Indian Railway (Golden Rock, for Mayavaram Junction).	43 ,,	30 ,,
7 East Ramnad	....	(1) Sri Meenakshi Electric Supply Corporation, Ltd., Devakottai.	1,327 ,,	300 K.V.A.
		(2) Sri Meenakshi Sundareswarar Electric Power Corporation, Ltd., Karaikudi.	1,543 ,,	477 ,,
		(3) The Kanadukathan Electric Supply Corporation, Ltd., Chettinad, P.O.	2,755 ,, (approximate).	475 ,,
		(4) The Chief Mechanical Engineer, South Indian Railway, Golden Rock (Supply for Manamadura Junction).	16 K.W. (load included in Railways).	12 K.W.
8 Srivilliputtur.	(1) Rajapalaiyam Mills, Ltd.	....	480 K.W.	318 ,,
	(2) Ramaraju Surgical Cotton Mills, Ltd.	....	53 ,,	58 K.V.A.
	(3) The Jayaram Mills, Ltd.	....	149 ,,	78 ,,
	(4) The Janakiram Mills, Ltd.	....	112 ,,	72 ,,
	(5) Sri Shanmugar Mills, Ltd.	....	131 ,,	137 ,,
9 Salem-Erode Licensee.	(1) Sri Rajendra Mills, Ltd., Salem.	....	491 ,,	204 ,,
	(2) Jawahar Mills, Ltd., Salem Junction.	....	849 ,,	392 ,,
	(3) Pullicar Mills, Ltd. (Tiruchengode).	....	391 ,,	181 ,,
		(1) Salem Junction	32 ,,	35 ,,
		(2) Southern Metals and Alloys, Ltd.	388 ,,	71 ,,
		(3) Salem Market	4 ,,	3 ,,
		(4) National Starch Industrials, Ltd.	55 ,,	27 ,,

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APPENDIX G-6—*cont.*

List of textile mills and other H.T. consumers, their connected load and maximum demand during 1948–49 *in Electric licensees' areas*—cont.

Serial number and name of electric licensee.	Textile mills.	Other H.T. consumers.	Connected load.	Maximum demand.
(1)	(2)	(3)	(4)	(5)
10 Mathurai ..	(1) Kothandaram Mills.	....	85 K.W.	91 K.V.A.
	(2) Balakrishna Mills ..	....	58 ,,	88 ,,
	(3) Madura Knitting, Co.	....	139 ,,	78 ,,
		(1) W.F.P.M. Hospital ..	107 ,,	..
		(2) Chintamani Talkies ..	59 ,,	..
		(3) South Indian Railway Co.	207 ,,	110 ,,
		(4) The Government Hospital.	30 ,,	..
		(5) Messrs. K. L. N. Radhakrishna Ayyar & Co. (Oil Mills).	66 ,,	..
		(6) Central Cinema	76 ,,	..
		(7) Mathurai Mills, Kochadai Mills (Bungalow).	56 ,,	..
		(8) Messrs. T. V. Sundaram Ayyangar & Sons.	110 ,,	..
		(9) S. M. Sundaram Chettiar.	75 H.P.	..
		(10) Kochadai Water Works ..	255 K.W.	..
		(11) S. B. Rajaratnam Chettiar (New Rice Mills).	50 H.P.	..
		(12) The Executive Officer, Mathurai, etc., Devasthanams.	47 K.W.	..
11 Guntur Power and Light, Ltd.	....	(1) Krishna Cement Works ..	80 ,,	..
		(2) Guntur Vegetable Oil Industries, Ltd.	49 ,,	16·3 K.V.A
12 Kanadukathan Electric Supply Corporation, Ltd.	....	(1) Neikuppai Electric Supply Co.	470 ,,	250 ,,
		(2) South Madras Electric Supply Corporation, Ltd., Arantangi.	190 ,,	150 ,,

APPENDIX H-1.

List of villages and townships supplied with electrical energy by the Government Electricity department as at the end of 1948–49.

PYKARA ELECTRICITY SYSTEM.

COIMBATORE DISTRICT.

I. Avanashi taluk.

1 Angeripalayam.
2 Andipalayam.
3 Annur.
4 Avanashi.
5 Avanashipalayam.
6 Avanashilingampalayam.
7 Chickadasamapalayam.
8 Chikkarampalayam.
9 Chockampalayam.
10 Dasamapalayam.
11 Kalingarayampalayam.
12 Kannarpalayam.
13 Kadathur.
14 Karamadai.
15 Karumbapalayam.
16 Kattampatti.
17 Kannampalayam.
18 Kuppipalayam.
19 Kallar.
20 Maddampalayam.
21 Madathupalayam.
22 Mangalakaripudur.
23 Masagoundenchettipalayam.
24 Mettupalayam.
25 Mathlampalayam.
26 Namblampalayam.
27 Nallithorai.
28 Odenthorai.
29 Perumanallur.
30 Ponnalgoundenpudur.

COIMBATORE DISTRICT—*cont.*

I. Avanashi taluk—cont.

31 Punalur.
32 Rakkiapalayam.
33 Thelungupalayam.
34 Thirumuruganpundi.
35 Thekkampatti.
36 Themampalayam.
37 Virugapalayam.
38 Vannipalayam.
39 Agraharapudur.
40 Krishnagoundenpudur.
41 Ranganathapuram.
42 Kasigoundenpudur.*
43 Semmandapalayam.*
44 Belladi.*
45 Puthur.*
46 Kompanaickenpalayam.*

II. Coimbatore taluk.

47 Agraharasamkulam
48 Athipalayam.
49 Bodipalayam.
50 Chettipalayam.
51 Chitraichavadi.
52 Ganapathy.
53 Govindanaickanpalayam.
54 Idigaral.
55 Kalapatti.
56 Kallimadai.
57 Kandangoundansalai.
58 Keeranatham.
59 Kondayampalayam.
60 Krishnarayapuram.

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APPENDIX H-1—*cont.*

List of villages and townships supplied with electrical energy by the Government Electricity department as at the end of 1948–49—cont.

PYKARA ELECTRICITY SYSTEM—*cont.*

COIMBATORE DISTRICT—*cont.*

II. Coimbatore taluk—cont.

61 Kuniamuthur.
62 Kurichi.
63 Kurudampalayam.
64 Machampalayam.
65 Madukkarai.
66 Maniakaranpalayam.
67 Narasimhanaickenpalayampudur.
68 Nanjundapuram.
69 Neelikonampalayam.
70 Ondiputhur.
71 Onnipalayam.
72 Palathorai.
73 Papanaickenpalayam.
74 Pannimadai.
75 Perianaickanpalayam.
76 Perur.
77 Perurchettipalayam.
78 Podanur.
79 Pudupalayam.
80 Samakulam.
81 Saravanampatti.
82 Sengalipalayam.
83 Sinnavadampatti.
84 Sircarsamakulam.
85 Souripalayam.
86 Thettipalayam.
87 Thondamuthur.
88 Thudiyalur.
89 Udayampalayam.
90 Uppilipalayam.
91 Vadamathurai.
92 Velankurichi.
93 Vellalore.
94 Vellalkinar.
95 Vellamadai.
96 Veerapandi.
97 Veerakeralam.
98 Venkitapuram.
99 Viyampalayam.
100 Pudur.
101 Peelamedu.
102 Gudalur.
103 West Chitraichavadi.
104 Ambilipudur.
105 Edayapalayam.
106 Kurumbanur.
107 Kumarapalaiyam.
108 Kuppanur.
109 Kalikanaickenpalayam.
110 Kuppakonampudur.
111 Pachapalaiyam.
112 Pallapalaiyam.
113 Senganur.
114 Sidhanaickenpalaiyam.
115 Sengodagoundenpudur.
116 Thattanpudur.
117 Athinarayanapuram.
118 Chinnamettupalayam.
119 Pullakulam.*
120 Ramanathapuram.*
121 Arumughagoundenpudur.*
122 Ramachettipalayam.*
123 Vadavalli.*
124 Thirumalayampalayam.*
125 Senniampalayam.*
126 Karumathampatti.*
127 R. N. Puram.*
128 Pattanam.*
129 Samichettipalayam.*
130 Jangamanaickenpalayam.*
131 Thoppumpatti.*
132 Athumunda Thottam.*
133 Sukkiravarapalayam.*
134 Thenkarai.*
135 Naduppapalayam.*
136 Periaputhur.*
137 Rangappagoundenpudur.*
138 Ayyampalayam.*
139 Kurumbapalayam.*
140 Pullangulam.*
141 Machampalayam.*
142 Vedapatti.*
143 Vellamalpatti.*
144 Kalkolapalayam.*
145 Verlampalayam.*
146 Karadayampalayam.*

COIMBATORE DISTRICT—*cont.*

II. Coimbatore taluk—cont.

147 Mattepalayam.*
148 Echaneri.*

III. Dharapuram taluk.

149 Dhalavaipatnam.
150 Periyakumarapalayam.

IV. Erode taluk.

151 Chennimalai.
152 Chengapalli.
153 Irugur.
154 Kunnathur.
155 Perundurai.
156 Reddipalayam.
157 Thalapatti.
158 Uthukkuli.
159 Virumandampalayam.
160 Kavathampalayam.

V. Gobichettipalaiyam taluk.

161 Gobichettipalaiyam.
162 Kolappalur.
163 Siruvallur.
164 Panickampalayam.*

VI. Palladam taluk.

165 Anuppapalayam.
166 Appanaickenpatti.
167 Arasur.
168 Arugampalayam.
169 Athappagoundenpudur.
170 Audinarayanapuram.
171 Bommaigoundenpatti.
172 Chandrakavi.
173 Chinnavadugapalayam.
174 Chinnayagoundenvalasu.
175 Irugur.
176 Kallapalayam.
177 Kallikanaickenpalayam.
178 Kaniyur.
179 Kannampalayam.
180 Karadibavi.
181 Karavalumadapur.
182 Kosavampalayam.
183 Marianallur.
184 Mailampatti.
185 Mudalipalayam.
186 Mangalam Vanjipalayam.
187 Neelambur.
188 Nanakkadu.
189 Odderpalayam.
190 Palladam.
191 Pappampatti.
192 Patnam.
193 Peedampalli.
194 Paramasivampalayam.
195 Perumalur.
196 Rasipalayam.
197 Ravathur.
198 Samalapuram.
199 Sengodagoundenpudur.
200 Somanur.
201 Sulur.
202 Thottipalayam.
203 Uthupalayam.
204 Ganapathipalayam.
205 Ichipatty.
206 Kalangal.
207 Kombakadu.
208 Naranapuram.
209 Puruval.
210 Rangasamuthram.
211 Samalapuram.
212 Selapampalayam.
213 Vadugampalayam.
214 Valayampalayam.
215 Velampalayam.
216 Selakaraichal.*
217 Semmipalayam.*
218 Sukkampalayam.*
219 Mallegoundenpalaiyam.*

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APPENDIX H-1—*cont.*

List of villages and townships supplied with electrical energy by the Government Electricity department as at the end of 1948–49—cont.

PYKARA ELECTRICITY SYSTEM—*cont.*

COIMBATORE DISTRICT—*cont.*

VII. Pollachi taluk.

220 Achipatti.
221 Angalakurichi.
222 Ambrampalayam.
223 Chittoor.
224 Erisinampatti.
225 Gomangalampudur.
226 Iyerpadi.
227 Kallapuram.
228 Kinathukadavu.
229 Kollpalayam.
230 Kottampatti.
231 Kottur.
232 Jakkarpalayam.
233 Lakshmanapuram.
234 Maickinampatti.
235 Mallamparai.
236 Malayandipatnam.
237 Muthur.
238 Othalkalmandapam.
239 Okkilipalayam.
240 Perianegamam.
241 Ponnapuram.
242 Samathoor.
243 Samathurai.
244 Sethumadai.
245 Singanallur.
246 Sholavampalayam.
247 Subbiagoundenpudur.
248 Valparai.
249 Vettaikaranpudur.
250 Mullapadi.*
251 Ramanamudalipudur.*
252 Kamakshipuram.*

VIII. Udamalpet taluk.

253 Annaikadavu.
254 Adivelli.
255 Alampalayam.
256 Andiyur.
257 Bodinatham.
258 Bodipatti.
259 Chinnakumarapalayam.
260 Chinnavalavadi.
261 Dhalai.
262 Gudimangalam.
263 Guruvappanaickanur.
264 Illuppananagaram.
265 Jellipatti.
266 Kulipalayam.
267 Kaniyur.
268 Karatholuru,
269 Kadathur.
270 Kolumam.
271 Komaralingam.
272 Manupatti.
273 Murungapatti.
274 Nallampalli.
275 Peddampalli.
276 Periyapatti.
277 Periavalavadi.
278 Pukkulam.
279 Pottayampalayam.
280 Raghalbavi.
281 Senjuvady.
282 Sundakkampalayam.
283 Udukkampalayam.
284 Vanasapatti.
285 Virugalpattipudur.

MATHURAI DISTRICT.

I. Dindigul taluk.

286 Chinnapatti.
287 Pittalapatti.
288 Sembatti.
289 Vakkampatti.

MATHURAI DISTRICT—*cont.*

II. Kodaikanal taluk.

290 Kodaikanal.

III. Nilakkottai taluk.

291 Ammanaickanoor.
292 Athur.
293 Batlagundu.
294 Nilakkottai.
295 Pattiveerampatti.
296 Ammapatti.*

IV. Palni taluk.

297 Akkamanaickenpudur.
298 Amarapundi.
299 Ayyakudi.
300 Chittarevu.
301 Eramanaickenpatti.
302 Naikarapatti.
303 Papampatti.
304 Vathagoundenvalasu.*
305 Kottamangalam.*

V. Periyakulam taluk.

306 Alagapuri.
307 Alinagaram.
308 Chinnamanur.
309 Cumbum.
310 Nagalapuram.
311 Ranganathapuram.
312 Srirangapuram.
313 Theni.
314 Uttamapalayam.
315 Veerapandi.
316 Venkitachalapuram.
317 Veppampatti.
318 Koduvilarpalli.*
319 Thadicherry.*

NILGIRIS DISTRICT.

I. Coonoor taluk.

320 Aravankadu.
321 Aravenu.
322 Ariahutty.
323 Bangalmattam.
324 Hoobathalai.
325 Hulical.
326 Jagathala.
327 Kattabettu.
328 Kilkunda.
329 Kilkotagiri.
330 Kotagiri.
331 Konakarai.
332 Kondillkka.
333 Manthakandy.
334 Marikal.
335 Thenery.*

II. Gudalur taluk.

336 Devarshola.
337 Gudalur.

III. Ootacamund taluk.

338 Glen Morgan.

MALABAR DISTRICT.

I. Palghat taluk.

339 Ellapulli.
340 Kanjikoda.
341 Paral.

COIMBATORE DISTRICT.

Kollegal taluk.

342 Kollegal.
343 Mudikondan.

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APPENDIX H-1—*cont.*

List of villages and townships supplied with electrical energy by the Government Electricity department as at the end of 1948–49—cont.

METTUR ELECTRICITY SYSTEM.

SALEM DISTRICT.

I. Omalur taluk.

1 Jalakantapuram.
2 Kolathur.
3 Mettur Dam.
4 Nangavalli.
5 Omalur.
6 Pachanampatti.
7 Taramangalam.
8 Virakkal.
9 Chettimunkurichi.*

II. Krishnagiri taluk.

10 Kaveripatnam.
11 Krishnagiri.

III. Dharmapuri taluk.

12 Arasampatti.
13 Dharmapuri.
14 Karimangalam.

IV. Salem taluk.

15 Ayodiapatnam.
16 Ellampalli.
17 Kondalampatti.
18 Kurumpatti.
19 Yercaud.
20 Chinnagoundapuram.*

V. Attur taluk.

21 Attur.
22 Dalavaipatti.
23 Ettapur.
24 Mettupatti.
25 Peddanaickanpalayam.
26 Seshanchavadi.
27 Vellappadi.
28 Narasingapuram.*
29 Chinnasamudram.*
30 Sundarapuram.*

VI. Tiruchengode taluk.

31 Komarapalayam.*
32 McDonald Choultry.

VII. Rasipuram taluk.

33 Chandrasekarapuram.
34 Kakaveri.
35 Kalkurichi.
36 Koneripatti.
37 Koundampalayam.
38 Mallur.
39 Malayampatti.
40 Masakalipatti.
41 Namagiripet.
42 Pudupatti.
43 Thengalpalayam.
44 Valasu.
45 Rasipuram.
46 Singalandapuram.
47 Vellalapatti.
48 Pattanam.
49 Arasapalayam.*

VIII. Harur taluk.

50 Uttangarai.
51 Singarapet.

IX. Namakkal taluk.

52 Erumaipatti.
53 Kondichettipatti.
54 Kongalathur.
55 Laddivadi-Pudupatti.
56 Mohanur.
57 Nallipalayam.
58 Namakkal.
59 Pandamangalam.
60 Pilikkalpalayam.
61 Velur.
62 Vengarai.
63 Kalichettipatti.*

COIMBATORE DISTRICT.

I. Erode taluk.

64 Edayankattuvalasu.
65 Komallaperupur.
66 Kodumudi.
67 Vairapalayam.
68 Veerappanchatram.

II. Bhavani taluk.

69 Ammapet.
70 Andiyur.
71 Bhavani.
72 Chittode.
73 Jambai.
74 Kalbavi.
75 Kosarimangalam.
76 Neringipet.
77 Olagadam.
78 Pudupalayam.
79 Singampet.
80 Thalapalayam.
81 Thippichettipalayam.
82 Thottipalayam.
83 Uruchikottai.
84 Appakudal.*
85 Mondipalayam.*
86 Oricherry.*
87 Paruvachi.*
88 Perumalpalayam.*
89 Kondayampalayam.*
90 Valli Thirupur.*
91 Andipalayam.*

TIRUCHIRAPPALLI DISTRICT

I. Karur taluk.

92 Balarajapuram.
93 Nadayanur.
94 Punjai Pugalur.
95 Puliyur.
96 Ranganathapuram.
97 Sambangi.
98 Samudram Extensions.
99 Thattakurichi.
100 Uppidamangalam.
101 Vennamalai.
102 Nanaparappu.
103 Gundagalpalayam.*
104 Manavagi.*
105 Nathamedu.*
106 Thanthonipatti.*

CHITTOOR DISTRICT.

I. Chittoor taluk.

107 Kalroadapalli.
108 Pakala.
109 Mungilput.*
110 Kasipata.*

II. Tiruttani taluk.

111 Nagari.
112 Sholinghur.
113 Tiruttani.

SOUTH ARCOT DISTRICT.

I. Tirukkoyilur taluk.

114 Kalandal.
115 Meyyur.
116 Sirmadurai.
117 Tirukkoyilur.
118 T. Pudupalayam.
119 Veerapandi.
120 Vettavalam.
121 Kumaramangalam.*
122 Poyyarasu.
123 T. Edayar.
124 Vellampudur.
125 Devanur.

II. Vriddhachalam taluk.

126 Mangalampet.
127 Semanganur.
128 Ulundurpet.
129 Vriddhachalam.

III. Villupuram taluk.

130 Kandamandi.
131 Tiruvannamallur.
132 Kaveripakkam.*

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APPENDIX H-1—*cont.*

List of villages and townships supplied with electrical energy by the Government Electricity department as at the end of 1948–49—cont.

METTUR ELECTRICITY SYSTEM—*cont.*

NORTH ARCOT DISTRICT.

I. Arkonam taluk.

133 Arkonam.
134 Arigilwadi.
135 Asanallikuppam.
136 Attupakkam.
137 Kadambattur.
138 Nemili.
139 Puliamangalam.
140 Sayanavaram.
141 Takkolam.
142 Parameswara Mangalam.*

II. Vellore taluk.

143 Shembakam.

III. Polur taluk.

144 Kunnathur.
145 Polur.

IV. Wallajah taluk.

146 Allalacheri.
147 Arumbakkam.
148 Kalaval.
149 Kaveripauk.
150 Kadaperi.
151 Lokapuram.
152 Ocheri.
153 Ozughur.
154 Panappakkam.
155 Sathambakkam.
156 Sumathangi.
157 Talangal.
158 Valluvambakkam.
159 Vangur.

NORTH ARCOT DISTRICT—*cont.*

V. Arni taluk.

160 Arni.
161 Kalambur.
162 Palanganoor.
163 Pennagar.
164 Satyavijayanagaram.
165 Kondavettithangal.*
166 Korakkai.
167 Tiruvettipuram.
168 Wandiwash.

VI. Tiruppattur taluk.

169 Anandapatti.
170 Chistakuleshram.
171 Four walls.
172 Jalarpet.
173 Pachalmitta.
174 Kasinayagampet.*
175 Agraharam.
176 Elagiri.
177 Kuppam.*
178 Vaniyambadi.

VII. Tiruvannamalai taluk.

179 Adayur Devanandal.
180 Nalavanpalayam.
181 Vengikal.
182 Athyantal.*
183 Anaipirandan.*

VIII. Kancheepuram taluk.

184 Wallajabad.
185 Valyavoor.
186 Damal.

CHINGLEPUT DISTRICT.

I. Tiruvallur taluk.

187 Ikkadu.*

PAPANASAM ELECTRICITY SYSTEM.

MATHURAI DISTRICT.

I. Mathurai taluk.

1 Austinpatti.
2 Avanlapuram.
3 Harveypatti.
4 Palanganatham.
5 Panayoor.
6 Pasumalai.
7 Tirupparankundram.
8 Veeramadayam.
9 Alagapuri.*
10 Koothlarkundu.*
11 Samayanallur.*
12 Sholavandan.*
13 Vadapalanji.*
14 Avanipuram.

II. Melur taluk.

15 Melur.
16 Thiruvadavoor.*

III. Tirumangalam taluk.

17 Dharmathupatti.
18 Kalligudi.
19 Kappalur.
20 Kinnimangalam.
21 Maravankulam.
22 Melapatti.
23 Muthupatti.
24 Palakkapudupatti.
25 Thenpalanji.
26 Tirumangalam.
27 Vadagaral.
28 Sengulam.*
29 Uchapatti.*

RAMNAD DISTRICT.

I. Sattur taluk.

30 Chinnamooppanpatti.
31 Kattalapatti.
32 Kokkilanjeri.
33 Kooragundu.
34 Pavali.
35 Pullankulam.
36 Sattur.
37 Sivakasi.
38 Sulakkarai.
39 Thiruthangal.
40 Valliyur.
41 Kumaralingapuram.*

II. Aruppukottai taluk.

42 Aruppukottai.
43 Gopalapuram.
44 Palayampatti.

III. Tiruvadanai taluk.

45 Tirumanjolai.

TIRUNELVELI DISTRICT.

I. Koilpatti taluk.

46 Ettayapuram.
47 Kovilpatti.

II. Tenkasi taluk.

48 Courtallam.
49 Erapannai.
50 Ilanji.
51 Kadayam.
52 Kilakadayam.
53 Kilapuliyur.
54 Madavaram.
55 Mathalamparai.
56 Mudaliarpatti.
57 Perambathur.
58 Pottalpudur.
59 Tenkasi.
60 Vallam.

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APPENDIX H-1—*cont.*

List of villages and townships supplied with electrical energy by the Government Electricity department as at the end of 1948–49—cont.

PAPANASAM ELECTRICITY SY STEM—*cont.*

TIRUNELVELI DISTRICT—*cont.*

III. Ambasamudram taluk.

61 Ambasamudram.
62 Ariyanayagipuram.
63 Kallidaikurichi.
64 Karaikurichi.
65 Mukkudal.
66 Mundanthorai.
67 Papanasam.
68 Pattamadai.
69 Pirancheri.
70 Shermadevi.
71 Vanlankulam.
72 Viravanallur.
73 Vellodai.
74 Vikramasingapuram.
75 Alwarkurichi. *
76 Ambur. *
77 Athalanallur, *
78 Brahmadesam. *
79 Girimalpuram. *
80 Harikesavanallur. *
81 Kuniyur. *
82 Manapparanallur. *
83 Mannarkoil. *
84 Melacheval. *
85 Mudiappapuram. *
86 Rathapuram. *
87 Seeniapuram. *
88 Serankoilpathu. *
89 Thiruppudaimaruthur. *
90 Vagaikulam. *
91 Vellanguli. *
92 Kodarangulam. *

IV. Tirunelveli taluk.

93 Gangaikondan. *
94 Thalayuthu. *

MADRAS ELECTRICITY SYSTEM.

	Name of village.	Mode of supply.
1 (*a*)	Madras City excluding the area covered by the former Sembivam Panchayat but including Saidapet and Little Mount and Guindy	Direct supply.
2	St. Thomas' Mount	Do.
3	Pallavaram	Do.
4	Meenambakkam	Do.
5	Chrompet	Direct supply.
6	Tambaram	Do.
7	Virugambakkam*	Do.
8	Thirumangalam*	Do.
9	Anakaputtur*	Do.
10	Rajakilpaukam*	Do.
11	Manapakkam*	Do.
12	Pammal	Do.
13	Santhoshapuram*	Do.

ANDHRA POWER SYSTEM.

1. VISAKHAPATNAM AREA.

VISAKHAPATNAM DISTRICT.

(a) Anakapalle taluk.

1 Duvvada.

(b) Bhimilipatam taluk.

2 Nagarappalem.*
3 Rayapalem.*
4 Bhimilipatam.
5 Chittivalasa.
6 Tagarapuvalasa.

(c) Bobbili taluk.

7 Bobbili.*
8 Salur.*

(d) Chipurupalli taluk.

9 Garividi.
10 Chipurupalli.
11 Bripuran.

(e) Visakhapatnam taluk.

12 Hanumanthakam.*
13 Pedavalteru.*
14 Simhachalam.

(f) Vizianagaram taluk.

15 Nellimorla.
16 Penubarti.
17 Vantitadi.*
18 Molda (Vizlarampuram).
19 Gulivindala Agraharam. *
20 Vizianagaram.

2. VIJAYAVADA AREA.

WEST GODAVARI DISTRICT.

Ellore taluk:

21 Kalaparru.
22 Bapulapadu.
23 Bommulur.*

2. VIJAYAVADA AREA—*cont.*

KRISHNA DISTRICT.

(a) Nuzvid taluk.

24 Gollapalli.
25 Mirzapuram.*
26 Marasapudi.
27 Nuzvid.
28 Ramannagudem.
29 Tukkulur.*
30 Vattigudipadu.*
31 Polasanapalli.
32 Pothureddipalli. *
33 Pedapullpaka. *

(b) Gannavaram taluk.

34 Ampapuram.
35 Chinavogirala.
36 Yenamalakuduru.
37 Gannavaram.
38 Kanakapalli.
39 Kaunmur.
40 Pedavegirala.
41 Penamalur.
42 Sevarigudem.
43 Vanukur.
44 Vuyyur.
45 Kondavavulur. *
46 Atukur. *
47 Telaprolu. *

(c) Bandar taluk.

48 Pedana.
49 Chilakalapudi.

(d) Vijayavaada taluk.

50 Ambapuram.
51 Bavanlpuram.*
52 Inikepadu.
53 Ganguru
54 Garikeparru.

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APPENDIX H-1—*cont.*

List of villages and townships supplied with electrical energy by the Government Electricity department as at the end of 1948–49—cont.

ANDHRA POWER SYSTEM—*cont.*

2. VIJAYAVADA AREA—*cont.*

KRISHNA DISTRICT—*cont.*

(*d*) *Vijayavada taluk*—cont.

55 Gunadala.
56 Gosala.
57 Idupugallu.
58 Machavaram.
59 Mogalrajapuram.
60 Machyalampadu.*
61 Patamata.
62 Penamalur.
63 Poranki.
64 Prasadampadu.*
65 Punadipadu.
66 Tadigadapa.
67 Vidyadharapuram.*
68 Akunur.
69 Ekanur.
70 Gandigunta.
71 Ramavarapupadu.*

GUNTUR DISTRICT.

(*a*) *Guntur taluk.*

72 Atmakur.
73 Angalakuduru.*
74 Chinnakakani.
75 Kaza.
76 Kakani.
77 Kolanukonda.
78 Narakodu.*

(*b*) *Tenali taluk.*

79 Sangamjagarlamudi.*

2. VIJAYAVADA AREA—*cont.*

GUNTUR DISTRICT—*cont.*

(*c*) *Bapatla taluk.*

80 Chebrolu.*
81 Vadlanur.*
82 Valivam.*

3. KAKINADA AREA.

EAST GODAVARI DISTRICT.

(*a*) *Kakinada taluk.*

83 Samalkot.
84 Kakinada.

(*b*) *Peddapuram taluk.*

85 Peddapuram.

(*c*) *Pithapuram taluk.*

86 Pithapuram.
87 Gollaprolu.

(*d*) *Ramachandrapuram taluk*

88 Velangi.
89 Ramachandrapuram.
90 Mandapeta.
91 Pasalapudi.

4. KURNOOL AREA.

KURNOOL DISTRICT.

Kurnool taluk.

92 Kurnool Town only.

Note.—* Villages marked thus are electrified during 1948–49.

Total number of villages and townships electrified to end of 1948-49 in all the Government Electricity Systems was 729.

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Appendix H-2.

List of villages and townships supplied by licensee undertakings as at the end of 1948–49.

(* Electrified during 1948–49.)

Serial number.	Name of licensee.	District.	Taluk.	Serial number.	Villages and townships.
1	Adoni	Bellary	....	1	Adoni town and the area comprised within the circle whose radius is 5 miles.
2	Alandur	Chingleput	Saidapet	2	Alandur.
3	Anakapalle	Visakapatnam ..	Anakapalle	3	Anakapalle town.
4	Anantapur	Anantapur	....	4	Anantapur.
5	Bellary	Bellary	....	5	Bellary.
6	Vijayavada	Krishna	....	6	Vijayavada.
7	British Cochin ..	....	....	7	British Cochin.
8	Bodinayakkanur ..	Mathurai	Periyakulam	8	Bodinayakkanur.
9	Bobbili	Visakhapatnam ..	Bobbili	9	Bobbili.
10	Coimbatore	Coimbatore	....	10	Coimbatore.
11	Kakinada	East Godavari ..	....	11	Kakinada.
12	Kancheepuram ..	Chingleput	....	12	Kancheepuram.
13	Coonoor	Nilgiris	....	13	Coonoor.
14	Kozhikode	Malabar	Kozhikode ..	14	Kozhikode town.
			Ernad	15	Feroke town.
15	Chittoor	Chittoor	....	16	Kattamanchi.
				17	Chittoor town.
				18	Santhapet.
				19	Greamspet (all within Municipality).
				20	Iruvaram village (outside).†
				21	Doddipalle.*
16	Cuddapah	Cuddapah	 2	22	Cuddapah town.
				23	Ramanapalle village.
17	Chingleput	Chingleput	Chingleput 4 ..	24	Chingleput.
				25	Tirumani village.
				26	Thimmavaram.
				27	Attur.
				28	Melamayur.
				29	Edayankadu.
				30	Vadapathi.
				31	Villiyambakkam.
				32	Vembakkam.
18	Cannanore-Tellicherry.	Malabar	Chirakkal 8	33	Cannanore.
			Kottayam	34	Chovva.
				35	Cantonement.
				36	Vallikunnu.
				37	Pallikulam.
				38	Ballapatam.
				39	Pappinicherry.
				40	Tellicherry.
				41	Kakkat village.
				42	Dharmadam.*
				43	Etakkat village.*
				44	Muzhappilangad.*
19	Chicacole	Visakhapatnam ..	 3	45	Chicacole.
				46	Guzaratipeta.
				47	Narasannapeta.
20	Carnatic	North Arcot	Tiruppattur 5 ..	48	Vaniyambadi.
				49	Pudur.
				50	Devasthanam.
				51	Old Vaniyambadi.
				52	Chettiyappanur.
			Vellore 5	53	Ambur.
				54	Alankuppam.
				55	Solur.
				56	Senenkuppam.
				57	Tharavalli.
				58	Devalapuram.*
				59	Thuthipet.*
				60	Upparapalli.*
				61	Kandrampalli.*
				62	Labbaimankuppam.*
21	Dindigul	Mathurai	Dindigul	63	Dindigul.
22	Devakottah	Ramnad	....	64	Devakottah.
				65	Shanmuganathapuram.
				66	Thanichanooraul.

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APPENDIX H-2—*cont.*

List of villages and townships supplied by licensee undertakings as at the end of 1948–49—cont.

Serial number.	Name of licensee.	District.	Taluk.	Serial number.	Villages and townships.
23	Dharapuram	Coimbatore	Dharapuram	67	Dharapuram town (Municipal area) comprising of the following villages :— Dharapuram. Kolingivadi. Nanjampalayam. Chitrathanpalayam. Upputhuraipalayam.
24	East Tanjore	Tanjore	Arantangi	68	Arantangi.
			Mannargudi	69	Mannargudi town 2 wards.
				70	Kuthanallur town.
				71	Puvanur.
				72	Ullikottai.
				73	Melavasal.
				74	Nidamangalam.
				75	Perambur.
				76	Athikadai.
				77	Kamalapuram.
				78	Kottaiyur.
				79	Avikottai.
				80	Pamini.
				81	Serankulam.
				82	Karnavar.
				83	Alacheri.
				84	Budamangalam.
				85	Lakshmangudi.
				86	Koradacheri.
				87	Velukudi.
				88	Mulangudi.
				89	Vadapathimangalam.
			Mayuram	90	Mayuram town 9 wards.
				91	Kuttalam town.
				92	Tranquebar town.
				93	Tirumanjeri.
				94	Kilayur.
				95	Anjaravathalai.
				96	Tholuthalangudi.
				97	Nallathankudi.
				98	Arivalur.
				99	Akkur.
				100	Anathandavapuram.
				101	Chittarakadu.
				102	Eravanjeri.
				103	Kadalangudi.
				104	Komal.
				105	Konerirajapuram.
				106	Manganallur.
				107	Nidur.
				108	Perumalkoil (Therazandur).
				109	Melayur.
				110	Sembanarkoil.
				111	Mulayur.
				112	Mappadugai.
				113	Theruvizhandur.
				114	Vandirajapuram.
				115	Aryapuram.
				116	Kothangudi.
				117	Ambanathapuram.
				118	Solachakkaranallur.
				119	Tirukkadayur.
				120	Vadagarai (Arangaduki).
				121	Porayar.
				122	Erukkattancheri.
				123	Elanthangudi.
				124	Kumaramangalam.
				125	Kollumangudi.
				126	Kaliappanallur.
				127	Kalahastinapuram.
				128	Mozhiyur.
				129	Pallavarayapet.
			Nannilam	130	Achuthamangalam.
				131	Ammayappan.
				132	Anaikuppam.
				133	Enangudi.
				134	Adaliyur.
				135	Kamalapuram.
				136	Kangalancheri.
				137	Kodavasal.
				138	Kulikkarai.
				139	Perunthuraikudi.
				140	Marudavancheri.

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APPENDIX H-2—*cont.*

List of villages and townships supplied by licensee undertakings as at the end of 1948–49—cont.

Serial number.	Name of licensee.	District.	Taluk.	Serial number.	Villages and townships.
24	East Tanjore—*cont.*	Tanjore—*cont.*	Nannilam—*cont.*	141	Mudikondan.
				142	Mulangudi.
				143	Nannilam.
				144	Peralam.
				145	Nallamangudi.
				146	Puttagaram.
				147	Sennanallur.
				148	Mappilaikuppam.
				149	Thirukandeswaram.
				150	Sengalipuram.
				151	Manavalanpettai.
				152	Srivanchiyam.
				153	Tittacheri.
				154	Tirukkannapuram.
				155	Tirukkannmangai.
				156	Tiruppugalore.
				157	Virkkudi (Vettar).
				158	Vishnupuram.
				159	Vadamattam.
				160	Pavithramanickam.
				161	Arasavanangudi.
				162	Semmangudi.
				163	Tirukkalambur (Sellur)
				164	Tiruvizhimashalai.
				165	Kothangudi.
				166	Koothanur.
				167	Poonthottam.
				168	Koilthirumangalam.
				169	Utharangudi.
				170	Marungur.
				171	Thediyur.
				172	Thirumarugal.
				173	Pradrammam.
				174	Vadugakudi.
				175	Kadagambadi.
				176	Manavanallur.
				177	Keeranur.
				178	Vandampalai.
				179	Podakudi
				180	Kuvalaikkal.
			Nagapattinam ..	181	Tiruvarur town 4 wards.
				182	Alangudi.
				183	Vizayapuram.
				184	Kodikalpalayam.
				185	Alivalam.
				186	Pinnavasal.
				187	Toppalanpullyur.
				188	Pullivalam.
				189	Thirukkuwalai.
				190	Ettukudi.
				191	Gudur.
				192	Olani.
				193	Mavoor.
				194	Kolapadu.
				195	Manakudi.
				196	Alathambadi.
				197	Apparakudi.
				198	Tennavarayanallur.
				199	Vallivalam.
				200	Kunniyur.
			Pattukkottai 6 ..	201	Pattukottai town.
				202	Adiramapatnam.
				203	Anaikadu.
				204	Madukkur.
				205	Nattuchalai.
				206	Movilur.
				207	Thuvarankurichi.
			Shiyali 5	208	Shiyali town.
				209	Vaithiswarankoil.
				210	Thadalankoil.
				211	Anaikaranchatram.
				212	Iveli.
				213	Kadhiramangalam.
			Tanjore 2	214	Vellam.
				215	Ellupatti.
			Tiruturaipundi 17 ..	216	Tiruturaipundi town (14 wards).
				217	Muthupet town (14 wards).
				218	Udayamarthandapuram.
				219	Alangadu.
				220	Idaiyur.
				221	Manali.
				222	Mangudi.

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APPENDIX H-2—*cont.*

List of villages and townships supplied by licensee undertakings as at the end of 1948–49—cont.

Serial number.	Name of licensee.	District.	Taluk.	Serial number.	Villages and townships.
23	Dharapuram	Coimbatore	Dharapuram	67	Dharapuram town (Municipal area) comprising of the following villages :— Dharapuram. Kolingivadi. Nanjampalayam. Chitrathanpalayam. Upputhuraipalayam.
24	East Tanjore	Tanjore	Arantangi	68	Arantangi.
			Mannargudi	69	Mannargudi town 2 wards.
				70	Kuthanallur town.
				71	Puvanur.
				72	Ullikottai.
				73	Melavasal.
				74	Nidamangalam.
				75	Perambur.
				76	Athikadai.
				77	Kamalapuram.
				78	Kottaiyur.
				79	Avikottai.
				80	Pamini.
				81	Serankulam.
				82	Karnavar.
				83	Alacheri.
				84	Budamangalam.
				85	Lakshmangudi.
				86	Koradacheri.
				87	Velukudi.
				88	Mulangudi.
				89	Vadapathimangalam.
			Mayuram	90	Mayuram town 9 wards.
				91	Kuttalam town.
				92	Tranquebar town.
				93	Tirumanjeri.
				94	Kilayur.
				95	Anjaravathalai.
				96	Tholuthalangudi.
				97	Nallathankudi.
				98	Arivalur.
				99	Akkur.
				100	Anathandavapuram.
				101	Chittarakadu.
				102	Eravanjeri.
				103	Kadalangudi.
				104	Komal.
				105	Konerirajapuram.
				106	Manganallur.
				107	Nidur.
				108	Perumalkoil (Therazandur).
				109	Melayur.
				110	Sembanarkoil.
				111	Mulayur.
				112	Mappadugai.
				113	Theruvizhandur.
				114	Vandirajapuram.
				115	Aryapuram.
				116	Kothangudi.
				117	Ambanathapuram.
				118	Solachakkaranallur.
				119	Tirukkadayur.
				120	Vadagarai (Arangaduki).
				121	Porayar.
				122	Erukkattancheri.
				123	Elanthangudi.
				124	Kumaramangalam.
				125	Kollumangudi.
				126	Kallappanallur.
				127	Kalahastinapuram.
				128	Mozhiyur.
				129	Pallavarayapet.
			Nannilam	130	Achuthamangalam.
				131	Ammayappan.
				132	Anaikuppam.
				133	Enangudi.
				134	Adaliyur.
				135	Kamalapuram.
				136	Kangalancheri.
				137	Kodavasal.
				138	Kulikkarai.
				139	Perunthuraikudi.
				140	Marudavancheri.

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APPENDIX H-2—*cont.*

List of villages and townships supplied by licensee undertakings as at the end of 1948–49—cont.

Serial number.	Name of licensee.	District.	Taluk.	Serial number.	Villages and townships.
24	East Tanjore—*cont.*	Tanjore—*cont.*	Nannilam—*cont.*	141	Mudikondan.
				142	Mulangudi.
				143	Nannilam.
				144	Peralam.
				145	Nallamangudi.
				146	Puttagaram.
				147	Sennanallur.
				148	Mappillaikuppam.
				149	Thirukandeswaram.
				150	Sengalipuram.
				151	Manavalanpettai.
				152	Srivanchiyam.
				153	Tittacheri.
				154	Tirukkannapuram.
				155	Tirukkannmangai.
				156	Tiruppugalore.
				157	Virkkudi (Vettar).
				158	Vishnupuram.
				159	Vadamattam.
				160	Pavithramanickam.
				161	Arasavanangudi.
				162	Semmangudi.
				163	Tirukkalambur (Sellur)
				164	Tiruvizhimashalai.
				165	Kothangudi.
				166	Koothanur.
				167	Poonthottam.
				168	Koilthirumangalam.
				169	Utharangudi.
				170	Marungur.
				171	Thediyur.
				172	Thirumarugal.
				173	Pradrammam.
				174	Vadugakudi.
				175	Kadagambadi.
				176	Manavanallur.
				177	Keeranur.
				178	Vandampalai.
				179	Podakudi
				180	Kuvalaikkal.
			Nagapattinam ..	181	Tiruvarur town 4 wards.
				182	Alangudi.
				183	Vizayapuram.
				184	Kodikalpalayam.
				185	Alivalam.
				186	Pinnavasal.
				187	Toppalanpuliyur.
				188	Pulivalam.
				189	Thirukkuwalai.
				190	Ettukudi.
				191	Gudur.
				192	Olani.
				193	Mavoor.
				194	Kolapadu.
				195	Manakudi.
				196	Alathambadi.
				197	Apparakudi.
				198	Tennavarayanallur.
				199	Valivalam.
				200	Kunniyur.
			Pattukkottai 6 ..	201	Pattukottai town.
				202	Adiramapatnam.
				203	Anaikadu.
				204	Madukkur.
				205	Nattuchalai.
				206	Movilur.
				207	Thuvarankurichi.
			Shiyali 5	208	Shiyali town.
				209	Vaithiswarankoil.
				210	Thadalankoil.
				211	Anaikaranchatram.
				212	Iveli.
				213	Kadhiramangalam.
			Tanjore 2	214	Vellam.
				215	Ellupatti.
			Tiruturaipundi 17 ..	216	Tiruturaipundi town (14 wards).
				217	Muthupet town (14 wards).
				218	Udayamarthandapuram.
				219	Alangadu.
				220	Idaiyur.
				221	Manali.
				222	Mangudi.

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Appendix H-2–*cont.*

List of villages and townships supplied by licensee undertakings as at the end of 1948–49—cont.

Serial number.	Name of licensee.	District.	Taluk.	Serial number.	Villages and townships.
24	East Tanjore—*cont.* ..	Tanjore—*cont.* ..	Tiruturaipundi—*cont.*	223	Pandi.
				224	Sengandi.
				225	Thalanayar.
				226	Palayangudi.
				227	Tillaivilagam.
				228	Kodiyalathur.
				229	Nedumbalam.
				230	Siddamalli.
				231	Jambavanodai Vadagadu.
				232	Velur.
25	East Ramnad ..	Ramnad	Mudukulattur ..	233	Abiramam town.
				234	Kamudhi.
			Paramakudi	235	Emaneswaram.
				236	Ilayankudi town.
				237	Paramakudi.
				238	Ayyakkudi.
				239	Athikarai.
				240	Pudur.
				241	Nainarkoil.
				242	Sathikarakudi.
			Ramnad	243	Kilakarai town.
				244	Ramnad town.
				245	Sakkarakottai.
				246	Tiruppulani.
			Sivaganga	247	Manamadura.
			Tiruppattur	248	Kallal.
				249	Sembanur.
				250	Singampunari.
26	Eluru	West Godavari ..	Eluru	251	Eluru.
27	Guntur	Guntur	Guntur	252	Guntur town.
			Tenali	253	Mangalagiri.
				254	Tenali town.
				255	Angalakuduru.
				256	Sangamjagarlamudi.
				257	Vadlamudi.
				258	Edlapalli.
				259	Valliveru.
			Bapatla	260	Chebrole.
28	Gudiyattam ..	North Arcot	Gudiyattam	261	Pernambut.
				262	Oomerabad.
				263	Nariyampet.
				264	Anganallur.
				265	Natham.
				266	Bhimapuram.
				267	Talayatham.
				268	Cheruvangi.
				269	Gudiyattam.
				270	Damallcheruvu.
				271	Vadakathipatti.
				272	Melmuttukkur.
				273	Singalpadi.
				274	Balur.
				275	Kothur.
				276	Kondasamudram.*
				277	Pakkam.*
				278	Kallur.*
				279	Chedukarai.*
				280	Alathur.*
				281	Melathur.*
				282	Madanur.*
				283	Tattalam.*
				284	Kalleri.*
				285	Sathgur.*
				286	Ayithempet.*
				287	Machempet.*
29	Gudivada	Krishna	....	288	Gudivada.
30	Hindupur	Anantapur ..	....	289	Hindupur.
31	Hospet	Bellary	....	290	Hospet.
				291	Chittivadagi village.
32	Kanadukathan ..	Ramnad ..	Tiruppattur	292	Kanadukattan.
				293	Pallathur.
				294	Kothamangalam.
				295	Lakshmipuram.
				296	Manachi.
				297	Kottaiyur.
				298	Velangudi.
				299	Alagapuri.
				300	Kondanur.
				301	Puduvayal.
				302	Poovandipatti.
				303	Chokkanendal.
				304	Athangudi (Muthupatnam).
				305	Palavangudi.
				306	Siruvayal.

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APPENDIX H-2- *cont.*

List of villages and townships supplied by licensed undertakings as at the end of 1948-49—cont.

Serial number.	Name of licensee.	District.	Taluk.	Serial number.	Villages and townships.
32	Kanadukathan—*cont.*	Ramnad—*cont.*	Tiruppattur—*cont.*	307	Kunnakkudi.
				308	Nemam.
				309	Sirukoodalpatti.
				310	Viramathi.
				311	Kilasevalpatti.
				312	Elayathangudi.
				313	Avinipatti.
				314	Keeranipatti.
				315	Pillayarpatti village and temple.
				316	Kotharl.
				317	Ayanarkoil.
				318	Vairavanapatti.
33	Kumbakonam ..	Tanjore	Kumbakonam ..	319	Kumbakonam.
				320	Darasuram.
				321	Sakkottai.
				322	Sundaraperumalkoil.
				323	Papanasam.
				324	Rajagiri.
				325	Pandaravadai.
				326	Iyyampettai.
				327	Tiruvadi.
				328	Royampet.
				329	Ganapathi Agraharam.
				330	Veeramengudi.
				331	Someswarapuram.
				332	Devangudi.
				333	Milathur.
				334	Tirukarangavanur.
				335	Mariammankoil.
				336	Poondi.
				337	Tirupuvanam.
				338	Ammapet.
				339	Valangiman.
				340	Tippirajapuram.
				341	Nachiarkoil.
				342	Tiruvadamarudur.
				343	Tipperumanallur.
				344	Veepattur.
				345	Aduthurai.
				346	Marudanallur.
				347	Irumbuthalai.
				348	Sa'amangalam.
				349	Kalanjeri.
				350	Ukkadai.
				351	Swamimalai.
				352	Tirunageswaram.
				353	Narasingampet.
				354	Thiruvavaduthurai.
				355	Mattanyanthidal.*
				356	Vallathoor.*
				357	Madakudi.*
				358	Tiruvisaloor.*
34	Kurnool	Kurnool	Kurnool	..	....
35	Karaikudi	Ramnad	Tiruppattur	359	Karaikudi.
				360	Kovilurg village.
				361	Mangaeiri village.
				362	Nachiapuram village.
				363	Ariyakkudi village.
				364	Amaravathipudur village.
				365	Zamindar Colony village (Devakkottah Road).
36	Karur	Tiruchirappalli ..	Karur	366	Karur.
37	Kodaikanal	Mathurai	.. ..	367	Kodaikanal.
				368	Shembaganur.*
				369	Munjikkal Jn.*
38	Kollegal	Coimbatore ..	.. ..	..	....
39	Mathurai	Mathurai	Mathurai	370	Mathurai town.
				371	Sambandar Alangulam.
				372	Pichai Pillai Savadi.
				373	Arrappalayam.*
				374	Sathamangalam.*
40	Mangalore	South Kanara ..	....	375	Mangalore town.
41	Masulipatnam ..	Krishna	Bandar ..	376	Masulipatnam.
42	Nellore	Nellore	.... ..	377	Nellore.
				378	Kovur (Workshops at Bitragunta, M. & S. M. Ry.)

APPENDIX H-2—*cont.*

List of villages and townships supplied by licensed undertakings as at the end of 1948–49—cont.

Serial number.	Name of licensee.	District.	Taluk.	Serial number.	Villages and townships.
43	Nagapattinam ..	Tanjore	Nagapattinam ..	379	Nagapattinam town.
				380	Vellpalayam.
				381	Nagore.
				382	Andanapet.
				383	Puttur.
				384	Sikkil.
				385	Poravacheri.
				386	Kivalur.
				387	Papakoil.
				388	Velanganni.
				389	Karuvelangadai.
				390	Adipallam extension.
				391	Kurichi.
				392	Puliyur.
				393	Aliyur.
				394	Manjakollai.
				395	Adikamangalam.*
44	Nattarasankottai ..	Ramnad	Sivaganga	396	Nattarasankottai.
				397	Sivaganga.
45	Narasaraopet ..	Guntur	....	398	Narasaraopet.
46	Nelkuppai	Ramnad	Tiruppattur ..	399	Nelkuppai.
				400	Pulankurichi.
				401	A. Tekkur.
				402	Kondavarayanpatti.
				403	Mahipalanpatti.
				404	Eraniyur.
				405	Sevvur.
47	Ootacamund	Nilgiris	....	406	Ootacamund.
				407	Ketti village.
			Ootacamund	408	Kerada.
				409	Acharakal.
			Coonoor	410	Santhur.
				411	Selas.
				412	Palada.*
				413	Halada.*
				414	Tidathatti.*
				415	Manapattu.*
				416	Thodanni
48	Okkur	Ramnad	....	417	Cholapuram.
				418	Okkur.
				419	Meelapungudi.
				420	Kilamangalam.
				421	Madagupatti.
				422	Chockanathapuram.
				423	Paganeri.
				424	Pattamangalam.
				425	Kandramanickam.
				426	Tiruppattur.
				427	Alavakottai.
49	Ongole	Guntur	....	428	Ongole.
50	Pollachi	Coimbatore ..	....	429	Pollachi, Vadugupalayam village within municipal limits.
51	Palni	Mathurai ..	....	430	Palni.
52	Periyakulam ..	Mathurai	Periyakulam ..	431	Periyakulam.
53	Palghat	Malabar	....	432	Palghat.
54	Proddattur	Cuddapah	....	433	Prodattur.
55	Rajahmundry ..	East Godavari ..	....	434	Rajahmundry town.
				435	Dowleshwaram village
56	Rameswaram ..	Ramnad	....	436	Rameswaram.
				437	Panchayat Board and temple.
57	Salem-Erode ..	Salem	....	438	Salem.
				439	Erode.
				440	Tiruchengode.
				441	Idappadi.
				442	Sankaridrug.
				443	Pallipalayam.
				444	Suramangalam.
				445	Kannankurichi.
				446	Chinnathirupathi.
				447	Periakolapatti.
				448	Seelainaickenpatti.
				449	Mayyanoor.*

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APPENDIX H-2—*cont.*

List of villages and townships supplied by licensed undertakings as at the end of 1948–49—cont.

Serial number.	Name of licensee.	District.	Taluk.	Serial number.	Villages and townships.
58	South Arcot ..	South Arcot ..	Villupuram ..	450	Villupuram.
				451	Valavanoor.
				452	Panayapuram.
				453	Radhapuram.
				454	Madurappakkam.
				455	Panambattu.
				456	Kollanur.
				457	Narimedu.
				458	Siruvandalur.
				459	Vaniyampalayam.
				460	Mambakkam.
				461	Mokshakulam.
				462	Palapet.
				463	Vikravandi.
				464	Malrajakuppam.
				465	Kannikoil.
				466	Pudari.
				467	Nariodai.
				468	Siruvallikuppam.
				469	Maharajapuram.
				470	Jaggampet.*
				471	Annamalainagar.*
			Tindivanam	472	Tindivanam.
				473	Kaveripakkam.
				474	Mylam.
				475	Batripuliyur.
				476	Singanur.
			Cuddalore	477	Cuddalore N.T.
				478	Cuddalore O.T.
				479	Panruti.
				480	Nellikuppam.
				481	Kondareddipalayam.
				482	Poongunam.
				483	Pudupet.
				484	Gavarapet.
				485	Kuchipalayam.
				486	Kozhipakkam.
				487	Paganadai.
				488	Melkumaramangalam.
				489	Sorayanur.
				490	Tirukandeswaram.
				491	Nathapet.
				492	Kondur.
				493	Malmlarpet.
				494	Karamanikuppam.
				495	Melpattambakkam.
				496	Kongampet.
				497	Kanderkottai.
				498	Varkalpet.
				499	Valapet.
			Chidambaram ..	500	Chidambaram.
				501	Vallampadugai.
				502	Bhuvanagiri.
59	Semblam	Madras	....	503	Semblam.
				504	Siruvallur.
				505	Paravallur.
				506	Ayanavaram.
				507	(Government and Inam).
					Chinnasembarambakkam.
60	Salur	Parvatipur ..	Visakhapatnam ..	508	Salur town.
				509	Parvatipur town.
61	Sivakasi	Ramnad	Sattur	510	Sivakasi.
62	Srivilliputtur ..	Ramnad	.. ..	511	Rajapalayam.
				512	Srivilliputtur.
63	Tirunelveli	Tirunelveli	Tirunelveli	513	Tirunelveli
				514	Palamcottah and Pettai
				515	Melapalayam.
				516	Tachanallur.
					Chattram Pudukulam.
			Srivaikuntam ..	517	Tuticorin.
				518	Vallanad.
				519	Mangalagiri.
64	Tiruchirappalli-Srirangam.	Tiruchirappalli ..	Kulittalai	520	Kulittalai town.
				521	Manaparai
				522	Krishnarajapuram.
				523	Sithalavai.
				524	Mahadanapuram.
				525	Marudur.
				526	Mayanoor.
				527	Mangavaram.
				528	Rajendram.
				529	Vagainallur.

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APPENDIX H-2—*cont.*

List of villages and townships supplied by licensed undertakings as at the end of 1948–49—cont.

Serial number.	Name of licensee.	District.	Taluk.	Serial number.	Villages and townships.
64	Tiruchirappalli-Srirangam—*cont.*	Tiruchirappalli—*cont.*	Kulittalai—*cont.* ..	530	Manathattai.
				531	Mettupadugai.
				532	Lalapettai (Kallapalli).
				533	Timmachipuram.
				534	Hiranyamangalam.
				535	Nadupatti.
				536	Tiruchendurai.*
				537	Paluvoor.*
				538	Karupattur.*
				539	Pillapalayam.*
			Lalgudi	540	Lalgudi.
				541	Manachanallur.
				542	Ayyampalayam.
				543	Angaral.
				544	Rikshandarkoil.
				545	Irungalur.
				546	Kallakudi.
				547	Dalmiapuram.
				548	Manakkal.
				549	Kanyamanickam.
				550	Pudur Uthamanur.
				551	Pullambadi.
				552	Punambalayam.
				553	Puvalur town.
				554	Sengandi.
				555	Najai Sengandal.
				556	Sirudayur.
				557	Tiruvellarai.
				558	Valadi.
				559	Samayapuram.
				560	Nochium.
				561	Pudukudi.
				562	Pachur.
				563	Salakkadu.
				564	Keelapalayam.
				565	Kuthur.
				566	Kattur.
				567	Pinnavasal.
				568	Peruvalanallur.
				569	Vellanur.
				570	Natarajapuram.
				571	Kovundakurichi.
				572	Pachampettai.
				573	Tirumanamedu.
				574	Purathakudi.
				575	Mahilambadi.
				576	Mandural.
				577	Kallagam.
			Musiri	578	Musiri town.
				579	Thottiam town.
				580	Natham.
				581	Mettupadugai.
				582	Pudupatti.
				583	Pulivalam.
				584	Sillaipillaiarputhur.
				585	Murukkur
				586	Kattuputtur.
				587	Mambarai.
				588	Sandapalayam.
				589	Tiruvenghi Hills.
				590	Thoraiyur town.
				591	Perumalpalayam.
				592	Peranur.
				593	Singalandapuram.
			Tiruchirappalli ..	594	Tiruchirappalli town 8 wards.
				595	Srirangam town 3 wards.
				596	Golden Rock (Ponmalaipatti).
				597	Abishekapuram.
				598	Allur.
				599	Andanallur.
				600	Ammangudi.
				601	Illuppur.
				602	Kambarasampettai.
				603	Kalkandarkottai.
				604	Kottampattur.
				605	Melur.
				606	Mutharasanallur.
				607	Ariyamangalam.
				608	Pandamangalam.
				609	Pettavaithalai.
				610	Sathanur.
				611	Sirugamani.
				612	Perugamani.
				613	Veraganeri.

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APPENDIX H-2—*cont.*

List of villages and townships supplied by licensed undertakings as at the end of 1948–49—cont.

Serial number.	Name of licensee.	District.	Taluk.	Serial number.	Villages and townships.
64	Tiruchirappalli—*cont.*	Tiruchirappalli—*cont.*	Tiruchirappalli—*cont.*	614	Tiruverambur.
				615	Uyyakondanthirumalai.
				616	Tiruppalathurai.
				617	Kolathur.
				618	Mookanarmalaipatti.
				619	Sengulam.
				620	Palur.
				621	Kavalkarapalayam.
				622	Anali.
				623	Uthamarkoil.
				624	Manjathadal.
				625	Navalpatti.
				626	Arasangudi.
				627	Edamalaipettipudur.
				628	Tiruchendurai.
				629	Paluvur.
				630	Vudivadangam.
			Udayarpalaiyam ..	631	Ariyalur town 14 wards.
				632	Kilapaluvur.
			Tanjore	633	Tirukkattupalli.
				634	Ombathuveli.
				635	Palmaneri.
			Pudukkotta (State) ..	636	Viralimalai.
				637	Annavasal.
				638	Tiruvappur.
				639	Usilampatti.
				640	Madlanallur.
65	Tirupati	Chittoor ..	Chandragiri	641	Tirupati town.
				642	Chandragiri.
				643	Renigunta.
				644	Perumallapalle.
				645	Peroor.
				646	Pudipatla.
				647	Managapuram.
				648	Pudipet.
				649	Thondavada.
				650	Thirumalai.
				651	Colapalle.
				652	Muthalareddipalle.
				653	Alipiri.
				654	Tiruchanur.
				655	Kamapalle.
				656	Narasingapuram.
				657	Caligopuram.
				658	Akkarampalle.
				659	Avilala.
				660	Phungavaripalle.
				661	Ravillavaripalle.
				662	Royal Cheruva.
				663	Sankariahgaripalle.
				664	Thookkivackam.
				665	Vedantapura Agraharam.
66	Tiruvallur	Chingleput ..	Tiruvallur	666	Ayveliagaram.
				667	Tiruvallur town.
				668	Perumbakkam.
				669	Kakalur.
				670	Periyakuppam.
				671	Pullyanguppam.
				672	Pungathur.
67	Tiruvottiyur ..	Chingleput ..	Tiruvallur	673	Tiruvottiyur.
				674	Kalatipet.
				675	Sattangadu.
68	Tiruppattur	North Arcot ..	Tiruppattur	676	Tiruppattur.
69	Tiruvannamalai ..	Do. ..	Tiruvannamalai ..	677	Tiruvannamalai.
70	Tanjore	Tanjore ..	Tanjore	678	Tanjore and its surroundings.
71	Tiruppur	Coimbatore ..	....	679	Tiruppur.
72	Udamalpet	Do. ..	Udamalpet	680	Udamalpet.
73	Udipi	South Kanara ..	....	681	Udipi.
				682	Karkal.
				683	Manipal and some parts.
				684	Ambalpadi.
				685	Kadiyur.
				686	Kadekar.
				687	Badagabattu.
				688	Puttur.
				689	Shivali.
74	Vellore	North Arcot ..	Vellore..	690	Vellore town.
				691	Toraipadi.
				692	Sattuwachari.
				693	Mullipalayam.
				694	Kaspa.
				695	Ramanaickenpalayam.
				696	Allavaram.*
				697	Vadavellur.*
				698	Sitheri.*

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Appendix H-2—*cont.*

List of villages and townships supplied by licensed undertakings as at the end of 1947-48—cont.

Serial number.	Name of licensee	District.	Taluk.	Serial number.	Villages and townships
74	Vellore—*cont.* ..	North Arcot—*cont.*	Gudiyattam 3 ..	699	Katpadi.
				700	Kangayanellore.
				701	Dharapadavelu.
				702	Viruthampet.
				703	Senguttai.*
			Walajah 7.	704	Walajah.
				705	Ranipet.
				706	Arcot.
				707	Visharam.
				708	Vannivedu.
				709	Mottur.
				710	Manathangal.
				711	Pinji.*
				712	Karai.*
				713	Navalpoor.*
				714	Gnmmattam.*
75	Visakhapatnam ..	Visakhapatnam ..	Visakhapatnam 2 ..	715	Visakhapatnam.
				716	Waltair.
76	Virudhunagar ..	Ramnad ..	1	717	Virudhunagar.
77	Villivakkam	Chingleput ..	1	718	Villivakkam.
78	Valparai	Coimbatore ..	1 ..	719	Valparai township.
79	Wellington	Nilgiris ..	1 ..	720	Wellington.

Note.—*Denotes extensions effected during the year 1948-49. The above details are as furnished by the concerned licensees.

Total number of villages electrified in licensed areas to end of 1948-49—720.

Appendix I.

PYKARA SYSTEM.

I. Installed Capacities of Transformers.

Power house.

	Numbers.	Voltage ratio.	K.V.A.
1 Singara Power House ..	3 × 7,810	11/66-110 K.V.	23,430
	2 × 12,500	11/110 K.V.	25,000
	2 × 5,000	11/66 K.V.	10,000
			Number.
2 Power House	2,000 K.V.A.	11/11-22 K.V.	1
	2,000 K.V.A.	11/22 K.V.	1
	2,000 K.V.A.	Do.	1
	1,000 K.V.A.	11/11 K.V.	2

II. List of Extra High Tension Sub-stations (66 K.V. and 110 K.V.).

			K.V.A.
1 Kattabattu	2 × 1,000	110/11 K.V.	2,000
2 Coimbatore	3 × 6,000	110/66 K.V.	18,000
	8 × 5,000	110/66/22-11 K.V.	40,000
3 Tiruppur	3 × 1,750	66-33/22-11 K.V.	5,250
4 Udamalpet Substation ..	3 × 1,750	Do.	5,250
5 Sembatti	3 × 1,750	Do.	5,250
6 Kozhikode	2 × 2,000	66/33-11 K.V.	4,000
7 Cannanore	2 × 1,000	66/33-11 K.V.	2,000
		Total ..	81,750

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Appendix I—*cont.*

PYKARA SYSTEM—*cont.*

III. List of High Tension Transformer Stations.

			Number.
Karamadai	250 K.V.A. ..	22 11 K.V.	1
	500 K V.A. ..	Do.	1
Madukkarai	500 K.V.A. ..	Do.	2
Pollachi	500 K.V.A. ..	Do.	2
Kodai tapping	150 K.V.A. ..	Do.	1

IV. Number of Distribution Transformer.

540 Numbers. 29,073·5 K.V.A.

METTUR SYSTEM.

List of Power House E.H.T., H.T. and Distribution Transformer Stations.

Name of station.	Numbers.	Voltage ratio. (K.V.)	Capacity in K.V.A.	Aggregate capacity K.V.A.
I. Installed Capacities of Transformers.				
1 Power House	3	11/66–110	12,500	37,500
	3	11/11–22 K.V.	2,000	6,000
II. E.H.T. Power Transformer Stations (66 K.V. and 110 K.V.).				
1 Erode	3	66–33/22–11 ..	1,000	3,000
2 Karur	3	66/22–11	750	2,250
3 Tiruchirappalli	3	66/33–11	2,500	7,500
	2	66/22–11	2,000	4,000
4 Tanjore	4	66/33–11	750	3,000
5 Tiruvarur	2	66/11	2,500	5,000
6 Nagapattinam	2	Do.	2,500	5,000
7 Singarapet	2	66/33–11	500	1,000
8 Tiruppattur	1	Do.	500	500
	1	66–33/22–11 ..	250	250
9 Ambur	2	66/33–11	500	1,000
10 Vadakathipatti	2	Do.	500	1,000
11 Vellore	2	66/33–22 and 66/33–11.	1,250	2,500
	1	66/33–11	750	750
	2	Do.	500	1,000
12 Tiruvannamalai	3	Do.	500	1,500
	1	Do.	250	250
13 Vettavalam	2	Do.	250	500
	1	Do.	100	100
14 Villupuram	4	66/33–22	1,750	7,000
	1	66/22–11	1,250	1,250
		Total ..		48,350
III. H.T. Power Transformer Stations (33 K.V. and 22 K.V.).				
1 Papanasam	2	33/11	500	1,000
	1	66/33/22–11 (connected as 33/11).	500	500
2 Karimangalam	2	33/11	250	500
3 Chittoor	2	Do.	250	500
4 Pakala	2	Do.	250	500
5 Ranipet	2	Do.	250	500
	1	Do.	100	100
6 Kaveripauk	2	Do.	250	500
	1	Do.	100	100

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Appendix I—*cont.*

METTUR SYSTEM—*cont.*

Name of station.	Numbers.	Voltage ratio (K.V.)	Capacity in K.V.A.	Aggregate capacity. K.V.A.
III. H.T. Power Transformer Stations (33 K.V. and 22 K.V.)—*cont.*				
7 Kancheepuram	2	33/6·6	250	500
	2	33 11–6·6	250	500
	1	33/11	250	250
8 Arkonam	2	66–33/22–11 (connected as 33/11).	500	1,000
	1	33/11	100	100
9 Kadambathur	2	Do.	250	500
10 Polur	2	Do.	250	500
	1	Do.	100	100
11 Arni	2	60–33/22–11 (connected as 33/11).	500	1,000
			Total ..	8,650

IV. Distribution Transformers.

341 Numbers. 18,723 K.V.A.

PAPANASAM SYSTEM.

I. List of Power E H.T. Transformers.

Sub-station.	Numbers.	Transformers	K.V.A.	Capacity K.V.A.
1 Power House, Papanasam ..	3	11/66 K.V.	7,250	25,750
	2	11/11–22 K.V.A. (one spare).	2,000	

II. E.H.T. Transformers Power Station (66 K.V. and 110 K.V.).

1 Tuticorin	2	66/22–11 K.V. ..	1,250	2,500
2 Kayattar	1	66/33–11 K.V. .	750	750
3 Koilpatti	2	Do. ..	1,000	..
	1	Do. ..	1,000 Spare.	3,000
4 Sattur	2	66/11 K.V.	250	500
5 Virudunagar	2	66/33–11 K.V. ..	1,000	..
	1	Do. ..	1,250	..
	1	Do. ..	1,000 Spare.	4,250
6 Mathurai	3	66/22–11 K.V. ..	3,000	
	1	Do. ..	3,000	12,000
			Total ..	27,000

III. H.T. Power Transformer Stations (33 K.V. and 22 K.V.).

1 Gurumurthinaickenpatti ..	2	33/11 K.V.	250	600
	1	Do.	100 Spare.	..
2 Rajapalayam	2	Do.	500	..
	1	66-33/22–11 K.V. ..	500 Spare.	1,500
3 Sivaganga	2	22/11–33 K.V. ..	250 Spare.	..
	1	Do. ..	250 Spare.	750
			Total ..	2,850

IV. Distribution Transformer Stations.

Capacity	Number.	Capacity.
	126	6,417·5 K.V.A.

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APPENDIX I—*cont.*

MADRAS SYSTEM.

LIST OF SUB-STATIONS AND CAPACITIES.

I. D. C. Substations.	Installed capacity. KW.
(*a*) Rectifier –	
1 Bells Road	750
2 China Bazaar	750
3 Moore Market	750
4 Nungambakkam	500
Total	2,750
(*b*) Rotary Substations—	
1 Egmore	2,500
2 Mount Road	3,000
3 East Georgetown	3,250
4 West Georgetown	3,000
5 Mylapore	1,000
6 Chetput	750
Total	13,500

II. A. C. STATIONS (33/5 KV SUB-STATIONS).		KVA.
1 Kilpauk	(stepup station 2 × 1,000)	2,000
2 Kodambakkam	1 × 200 + 1 and 50 spare	250
3 St. Thomas Mount	2 × 300	600
4 Meenambakkam	2 × 100 (one spare)	200
5 Pallavaram	1 × 300 (200 spare)	500
6 Chromepet	1 × 200 (1 and 50 spare)	250
7 Tambaram	1 × 200 (100 spare)	300
Total		4,100

DISTRIBUTION TRANSFORMERS.

	Number of transformers.	Capacity. KVA.
(*a*) 33 KV/400 Substations—		
1 Virugambakkam	1	100
(*b*) 5 KV/440 V Substations—		
(i) Attended Stations 6 Nos.	13	2,450
(ii) Unattended and Kiosak substations 8 Nos.	11	890
(iii) Pole mounted substations 56 Nos.	56	3,490
Total	81	6,930

ANDHRA SYSTEM.

I. INSTALLED CAPACITIES OF TRANSFORMERS.

	Number.	Voltage ratio.	KVA.	Aggregate capacity. KVA.
Power-house.				
Vijayavada	2	3·3 KV/11–33 KV	1,500	3,000
	1	3·3 KV/11 KV	1,500	1,500
	2	3·3 KV/11–33 KV	750	1,500
Visakhapatnam	2	3·3 KV/11–33 KV	1,500	3,000
	3	3·3 KV/11–33 KV	750	2,250

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	Number.	Voltage ratio.	KVA.	Aggregate capacity. KVA.
I. Installed Capacities of Trasformers—*cont.*				
Power-house—cont.				
Kakinada	2	3·3 KV/11 KV ..	250	500
	1	400 V/11 KV ..	375	375
Kurnool	1	400 V/3·3 KV ..	200	200
			Total ..	12,325
II. E.H.T. Power Transformer Stations (66 KV + 110 KV)—*Nil.*				
III. H.T. Power Transformer Stations (33 KV and 22 KV).				
Vijayawada.				
1 Tenali	2	33/11 KV	500	1,250
		Do.	250	
2 Eluru	1	Do.	250	250
3 Nuzvid	2	Do.	100	200
4 Gudivada	2	Do.	100	200
5 Masulipatnam	2	33/6·6 KV	250	600
	1	33/11 KV	100	
Visakhapatnam.				
1 Chittiralasa	2	33/11 KV	500	1,000
2 Vizianagram	2	Do.	500	1,000
3 Penbarti	2	Do.	250	500
Kakinada—Nil.				
Kurnool—Nil.				
			Total ..	5,000

IV. Distribution Transformers.

	Number.	Voltage ratio.	Aggregate capacity. KVA.
Vijayavada	64		2,840
Visakhapatnam	32		2,085
Kakinada	16		995
Kurnool	6		280
(Includes Station transformers of capacity as shown below).			
Vijayavada	2	150 KVA 3·3 KV/400 V ..	550
	1	250 KVA 11 KV/400 V ..	
Visakhapatnam	3	150 KVA 3·3 KV/400 V	450
Kakinada	2	250 KVA 3·3 KV/400 V	500
Kurnool	1	50 KVA 3·3 KV/400 V	50

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PUBLIC WORKS DEPARTMENT

(Electricity)

G.O. No. 2412, 27th June 1949

Electricity Department—Administration Report—1948–49—Recorded.

READ—the following paper :—

From the Chief Engineer (Electricity), No. 372-C/49-47, dated 1st June 1949.

Order—No. 2412, P.W. (Electricity), dated 27th June 1949.

Recorded.

2. This is the twenty-second Annual Report of the Government Electricity Department and it contains a record of progress of Electrical Development in the Province. The aggregate demand under the Government Systems during the year under review was 121,975 K.W. as against 105,630 K.W. in 1947–48 and the total number of units generated 560·4 millions as against 434·36 millions in 1947–48. The net revenue realized from the Hydro-Electric Systems was Rs. 90·36 lakhs and return on the capital outlay was 9 per cent. The year 1948–49 was the second year of operation of the Madras Thermal System (under the Madras Electricity Department) the tenth year of the Visakhapatnam and Vijayavada Thermal Systems, the ninth year of the Kakinada Thermal System and the third year of the Kurnool Thermal System (under the Madras Electricity Department). The number of units generated at Madras, Visakhapatnam, Vijayavada, Kakinada and Kurnool Systems was 102·07, 10·68, 17·30, 1·89, 0·56 millions respectively.

3. The capital expenditure for the year on new projects and extensions under construction amounted to Rs. 2·7 crores. The important major schemes submitted to Government by the Chief Engineer (Electricity) were :—

(i) Cuddapah Thermal Scheme estimated to cost Rs. 102·46 lakhs initially rising to Rs. 142·08 lakhs in ten years.

(ii) Nandyal Scheme estimated to cost Rs. 11·38 lakhs initially rising to Rs. 14·92 lakhs in five years.

(iii) Tadpatri scheme at an estimated cost of Rs. 6·55 lakhs initially rising to Rs. 11·06 lakhs in five years.

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(iv) Kurnool Thermal Scheme estimated to cost Rs. 141·66 lakhs initially rising to 145·27 lakhs in ten years.

(v) Extension of supply to South Kanara from Mysore at an estimated cost of Rs. 48·32 lakhs initially rising to Rs. 62·05 lakhs in ten years.

Items (i) to (iii) above have been sanctioned by Government subsequent to 1948-49, to which the report under review relates. Orders in respect of the last two items will be issued in due course.

4. During the year under review the following undertakings were taken over by the Government with the consent of the licensees :—

	Date of taking over.
(1) Cuddapah Electric Supply Company	18th November 1948.
(2) Kollegal Panchayat Board	1st October 1948.
(3) Valparai Township	1st July 1948.

Notice of purchase on the termination of the period of licence has been served on the following licensees during the year :—

	Date of expiry of licence.
(1) Kumbakonam Electric Supply Corporation ..	14th April 1950.
(2) Mangalore Electric Supply Company	6th May 1950.
(3) Tirunelveli-Tuticorin Electric Supply Company	23rd September 1950.
(4) Reliance Electric Supply Corporation (Okkur)	18th November 1950.
(5) Salem–Erode Electricity Distribution Company, Limited.	6th January 1951.

5. The War Costs Surcharge Orders were continued under the Madras Essential Articles Control and Requisitioning (Temporary Powers) Act, 1946. Under these orders, the Electricity Department was authorized to continue to levy surcharge on all its consumers including licensees at 10 per cent in hydro-electric areas and 20 per cent on L.T. consumers in Thermal areas and 10 per cent on L.T. consumers in the M.E.S. area. The licensees obtaining bulk supply from the Electricity Department were also authorized to continue to levy on all their H.T. consumers the same surcharge as levied by the department on its H.T. consumers. The Electricity department was also authorized to levy surcharge at 10 per cent on all its industrial consumers in hydro-electric areas either directly or through licensees. The General War Costs Surcharge Order for the licensees undertakings was also continued and several licensees were authorized to levy surcharge at the rate fixed by the Government.

6. The restrictions on the working of oil engine generating stations continued to be in force during the year. The restrictions imposed on the number of shows and also on the exhibition of slides, trailers, etc. in the cinemas in the City of Madras including the area served by the Sembiam undertaking and in the panchayat areas of the Chingleput District receiving supply from the Madras system were removed.

The restriction and control orders were continued for a further period of one year beyond 1st October 1948. Supply of electricity to domestic services, agricultural loads and industrial loads up to 10 H.P. in the areas in the Hydro-Electric systems was excluded from the operation of the electricity restriction and control orders.

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Restrictions on temporary supply to cinemas were further relaxed by the Government. Revised instructions were also issued by the Government regarding essentiality certificates for supply of power in licensees areas.

7. His Excellency the Governor of Madras places on record his appreciation of the continued good work done by the Electricity Department during the year.

(By order of His Excellency the Governor)

T. A. VARGHESE,
Secretary to Government.

To the Chief Engineer (Electricity).
" Chief Electrical Inspector to Government.
" Public Department.

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